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Feed

Outlook and Situation Report

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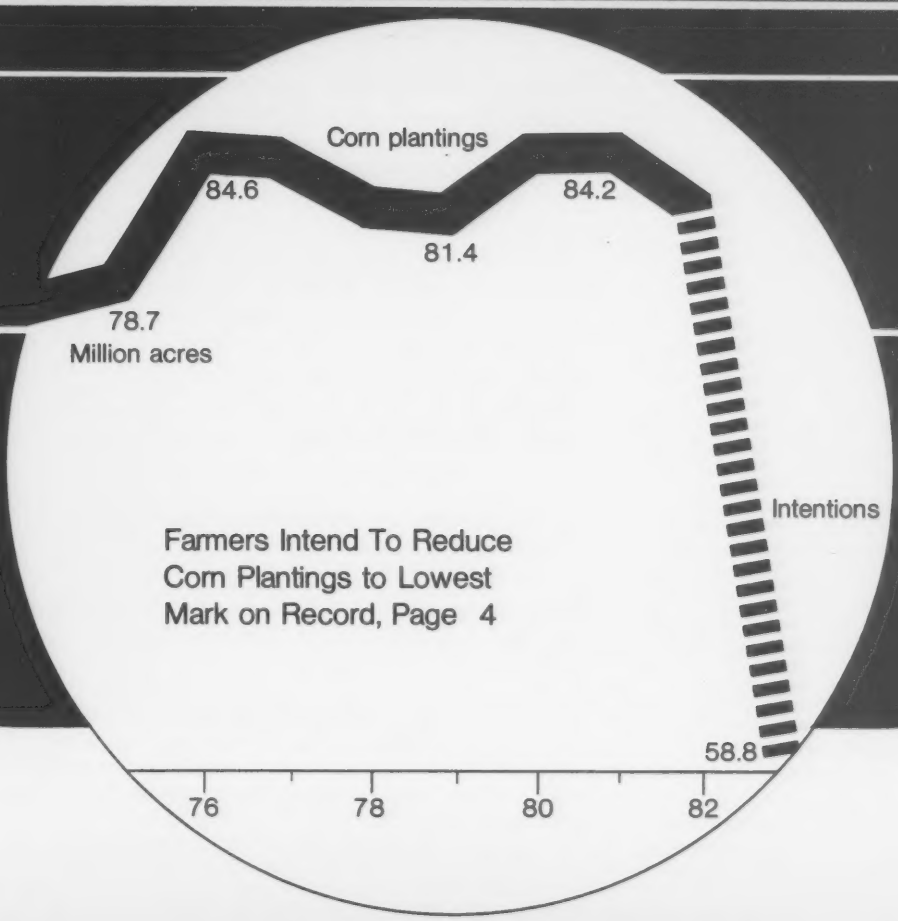

Farmers Intend To Reduce Corn Plantings to Lowest Mark on Record, Page 4

Contents

Situation and Outlook for Feed Grains 2
Feed Grain Supply and Utilization 2
Corn 2
Sorghum 5
Barley 6
Oats 6
Hay 7

Feed Demand 7

Food and Industrial Demand 7

World Coarse Grain Situation 8

Special Article
Regional Feed Consumption Estimates 11

List of Tables 16

Situation Coordinator
Larry Van Meir

Principal Contributors
Larry Van Meir (202) 447-8776
Shirley Frye (202) 447-8776 (Statistical)
Janet Livezey (202) 447-8444 (FSI)
Sally Byrne (202) 447-8857 (World)

National Economics Division
Economic Research Service
U.S. Department of Agriculture
Washington, D.C. 20250

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Summary

Prospects that the corn reserve will be triggered this month or next have declined recently, because of two developments. First, the special procurement program run by USDA in April to secure additional grain for PIK payments will move 130 million bushels—more than expected earlier—from the farmer-owned reserve into free stocks. Second, exports for 1982/83 are now forecast at 1.95 billion bushels, 50 million less than expected earlier. Consequently, free stocks are not likely to tighten enough to trigger the reserve unless weather seriously delays planting and puts pressure on short-run supply.

The area planted to corn this year will be the smallest on record if farmers carry out intentions. In late April, they reported plans to plant 58.8 million acres for all purposes this spring—28 percent below last year's plantings and the lowest figure since annual records were started in 1890. Plantings of sorghum, barley, and oats for grain production this year will total about 34.5 million acres, down 14 percent from last year, according to reported intentions.

Over half the prospective decline in feed grain production will be offset by larger carryover stocks. Production is projected at 188 million metric tons—67 million less than last year. However, stocks on hand at the beginning of the crop year are expected to total 108 million tons—37 million more than a year earlier. Consequently, supply for 1983/84 probably will be reduced by only 30 million tons from the record 328 million available for 1982/83. Total supply will still be large relative to use, and farm prices may average only slightly higher than in 1982/83. Almost all of the supply reduction will be in corn.

Because of the production cut in this year's feed grains, carryover stocks for 1983/84 are expected to drop almost 30 percent from 1982/83. The reduction would be almost entirely in corn carryover—down nearly 40 percent, from 3.4 to 2.1 billion bushels—and would be accompanied by some improvement in average farm price for corn and other feed grains as well.

Hog, cattle, broiler, and turkey feeding will use more grain this spring and summer than a year earlier. Of particular significance is the turnaround in the number of hogs this spring. April-June will be the first quarter to exceed a year earlier in hog feeding since July-September 1980. Further, the increase over a year earlier will carry through the summer and fall. Some of the effect of the larger livestock and poultry numbers may be slightly moderated by a decrease in feeding rates, since livestock/feed price ratios are less favorable than last year.

Food, seed, and industrial use increased over a year earlier by 15 percent during January-March. Growing demand for ethanol as a fuel additive accounted for about 70 percent of the increase, with the balance resulting from continued expansion in the market for high fructose corn syrup (HFCS). Greater use of HFCS in the soft drink industry over the next 2 years likely will bring the wet-milling industry near full capacity. The use of ethanol as a fuel additive is expected to grow throughout the decade.

A number of factors have combined to lower world coarse grain trade about 15 percent in 1982/83 (July-June). Soviet coarse grain imports are estimated to decline from 26 million tons to about 12 million. Larger production in Eastern and Western Europe has permitted countries there to get by with smaller imports. Economic recession has dampened livestock output in some developed countries, decreasing their need for feed grains. The decline in U.S. feed grain exports is not expected to be as severe as the drop in total world trade, though, because production in some of the major export competitors has also fallen sharply.

SITUATION AND OUTLOOK FOR FEED GRAINS

Feed Grain Supply and Utilization

Disappearance of feed grains during January-March of this year amounted to 62.0 million metric tons, 10 percent above a year earlier. Less grain was exported, but food, seed, and industrial use (FSI) and feed and residual disappearance were both up.

The January-March disappearance pushed use of feed grains for the first half of the 1982/83 feed year to 131.2 million tons—5.2 million more than during October-March of 1981/82. Disappearance so far this season is the second highest on record, exceeded only by the 133.8 million tons used during the first half of 1979/80. Use for the FSI category was up 1.2 million tons from 1981/82, and feed and residual disappearance was up 6 million. However, exports were down 2 million tons.

In spite of the large disappearance during the first half of the feed year, April 1 feed grain stocks were a record 188.6 million tons—38.6 million more than a year earlier. Approximately 94.6 million tons of the April 1 stocks were in the Commodity Credit Corporation (CCC) inventory and the farmer-owned reserve (FOR), compared with 59.3 million so disposed a year earlier. This leaves "free" stocks—feed grain readily available to the market at prevailing prices in May—of approximately 93.5 million tons, compared with 86.2 million last year. However, a part of the regular loan corn and sorghum on hand this year has been pledged for PIK payments and will not be available to the market until this fall.

Feed grain disappearance for April-September this year is expected to total 87 million tons—1.4 million greater than use for the comparable period last year.

A number of factors will ease the impending tightness in free stocks. First, about 155 million bushels of corn and sorghum will come out of the FOR and be available to the market in late spring or early summer when farmers deliver grain to the CCC under the special procurement program for PIK (under this program, growers bid to retain a portion of the grain they offered to forfeit to the CCC). Second, new-crop barley, oats, and some new-crop sorghum will become available in July and August, and some new-crop corn will be harvested in late August and September. Finally, some old-crop grain may be marketed in July-September under the rotation provision for the reserve.

Corn

January-March Disappearance a Record

Disappearance of corn from stocks during January-March this year was 2.1 billion bushels—12 percent larger than a year earlier and a record for the quarter. FSI use was up from 153 million bushels last season to 176 million this year, a 15-percent increase. Growth in the markets for corn sweeteners and ethanol as a gasoline additive accounted for the additional use. Exports were 508 million bushels, only slightly above the 489 million shipped a year earlier.

Feed and residual disappearance in January-March amounted to almost 1.4 billion bushels—an astounding 16 percent over the same period last year. The puzzling aspect of this disappearance figure is that when the change in livestock and poultry numbers from a year earlier is taken into account, the implied feeding rate is unrealistically high. Moreover, the winter was milder than usual, which tends to reduce feeding per animal.

Fed cattle, dairy, broiler, and turkey production used more feed in January-March than a year earlier, but pork and egg production and nonfed beef used less. The net result appears to be a 2- to 3-percent increase in feed use for the quarter, taking into account livestock numbers and higher feeding rates. Use of corn was augmented as corn was substituted for sorghum, which was relatively high priced. Based on these estimates, livestock and poultry feeding of corn likely accounted for less than half of the increase during January-March, with the remainder of the increase unaccounted for—the residual disappearance.

The increased disappearance of corn resulted entirely from a reduction in on-farm stocks, which fell from over 6.1 billion bushels on January 1 to 4.4 billion on April 1, a drop of 1.7 billion. Off-farm stocks dropped by only 315 million bushels from January 1 to April 1. In 1982, on-farm stocks dropped 1.4 billion bushels from January to April, while off-farm stocks fell by 428 million.

One factor affecting the size of the residual disappearance could be moisture content of corn in farm storage. If stocks are reported largely on the basis of volume and not by weight adjusted to a constant moisture content, and if the volume of corn in on-farm storage on January 1 had a higher average moisture content than a year earlier, the apparent increase in feed and residual use would be overstated by the difference in moisture content. However, this factor alone would not account for all the increase. A small part of the increase in residual use could be accounted for by greater use of airtight silos. Corn with a much higher-than-average moisture content is stored in these facilities. So, if corn fed from airtight silos is reported by volume, the amount fed will be overstated. However, these two factor together could only account for a small part of the increase in residual disappearance. Other factors are waste, grain in transit, and reporting and estimation errors.

Will Tight Free Stocks Trigger the Reserve?

Although a record 6.4 billion bushels of corn were on hand in all positions April 1, about 3.2 billion were tied up in CCC inventory and the FOR, leaving free stocks of 3.2 billion bushels. A year earlier, April 1 stocks amounted to 5.1 billion bushels with 1.4 billion isolated from the market, leaving free stocks of 3.7 billion. However, part of the corn under regular loans is pledged for PIK payments and will not become available until this fall.

Corn stocks on April 1

Item	1982	1983
	Million bushels	
Total stocks	5,132	6,363
CCC inventory	262	[1]473
Private	4,870	5,890
FOR	1,165	2,700
Free	3,705	3,189
Under loan	716	246
Extended loan	109	40
Other[1]	2,880	2,903

[1]Partly estimated.

Use during this April-September is expected to total almost 3 billion bushels—200 million less than free stocks on April 1. The tight free stock situation became apparent in early February as the amount of 1982-crop corn put under loan rose from 762 million bushels on December 29 to over 1.4 billion by February 5. Corn in regular loans, which can be redeemed at any time and then sold or used, reached a peak of 320 million bushels on February 2—226 million of 1982 corn and 94 million from the 1980 and 1981 crops. The price of No. 2 yellow corn at St. Louis rose from an average of $2.28 a bushel during the last half of January to $2.54 during the first week of February.

Between early February and mid-April, 210 million bushels of corn moved into the FOR, and regular loans declined to 231 million. About 36 million bushels of the decline in regular loans on 1982 corn were redeemed. Part of the remaining outstanding regular loans have either been pledged for PIK or were bid to USDA in early April as part of the special procurement program to secure additional grain for PIK payments. The amount of corn eligible to be redeemed from regular loans and sold during the remainder of the crop year may be no more than 100 to 125 million bushels. As a result of this further tightening of free stocks and the strong feed and residual use implications of the grains stock report released on April 21, the price of corn in Central Illinois averaged $3.12 a bushel the last week of April, implying an average farm price of about $3.05. Consequently, an additional 10-cent-a-bushel increase would have triggered Reserve IV (1981-crop corn) and 20 cents a bushel, Reserve V (1982-crop corn).

The supply situation eased somewhat in early May because of three factors. First, data released on the special procurement program for PIK showed that about 130 million bushels of corn would be returned to free stocks from the reserve in late spring and early summer. Second, reduced prospects for exports the remainder of this year resulted in a decline of 50 million bushels in the export estimate for 1982/83. Third, a special survey of farmers' planting intentions showed prospective planting to be somewhat larger than had been expected. The price of corn in Central Illinois dropped about 12 cents a bushel from the end of April to mid-May.

There appears some likelihood that Reserve IV may be triggered between May and mid-July. Because of widespread wet weather during April, spring field work and plantings are behind schedule over most of the country. Consequently, seedbed preparation and planting will be given priority as field conditions permit. With farmers preoccupied with field work, farm sales of corn may not be adequate to maintain pipeline stocks and corn prices may have to move up to stimulate an increase in sales. Although there were 2 billion bushels of corn in off-farm storage on April 1, not all of this is available as pipeline stocks because almost 800 million bushels are under loan.

The probability of the reserve being triggered after early July declines rapidly. New-crop barley, oats, and sorghum will become available in July; PIK payments of sorghum and corn will also start to become available in July; some reserve grain may be rotated under the 30-day rollover provision; and harvest of new-crop corn will start in late August. Unless it turns out to be a poor growing year, some seasonal price weakness can be expected in August and September.

The grain trade apparently believes that if the reserve is to be triggered this year, it will be triggered by July. At the end of April, the settlement price at Chicago for the July corn contract was $3.16 a bushel, compared with $3.07 and $2.99 for the September and December contracts, respectively.

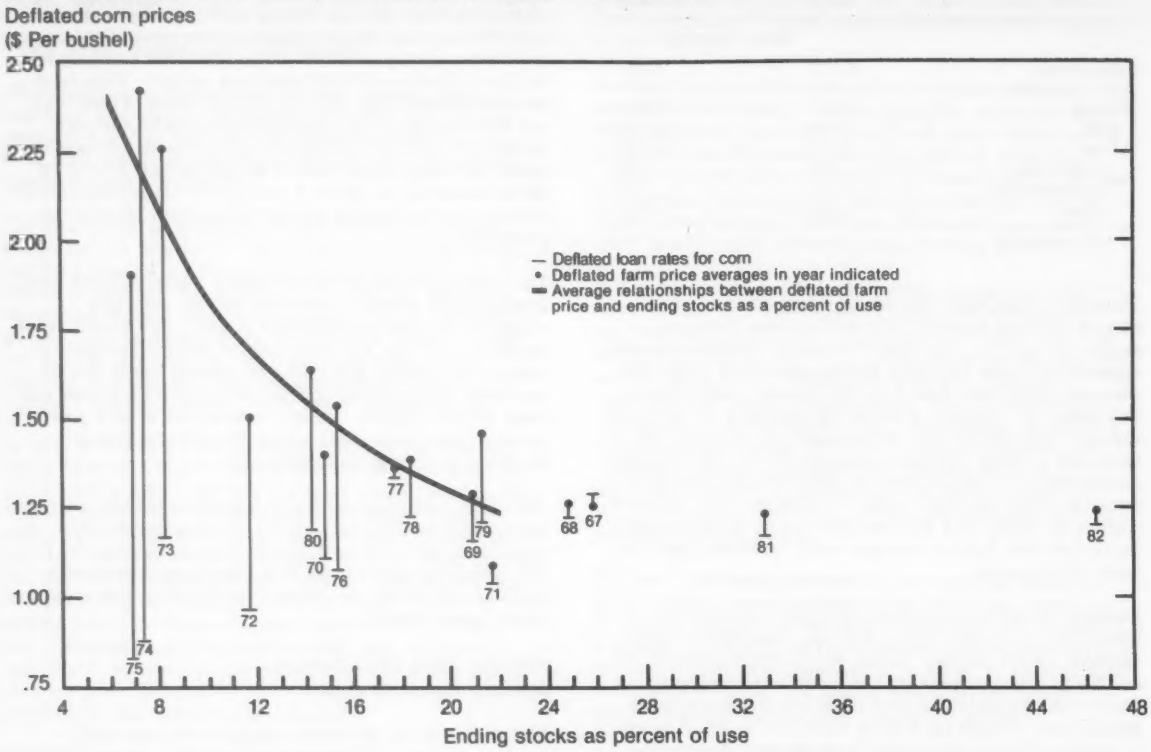
PIK May Hold 1983 Crop to About 6 Billion Bushels

PIK proved to be extremely popular with corn and sorghum farmers; 13.8 percent (14 million acres) of the combined corn/sorghum base was signed up for whole-base PIK and 44.9 percent (45.4 million acres) was signed up for the 10-30 percent PIK program. An additional 19.3 percent (19.5 million acres) was enrolled in the acreage reduction and paid land diversion programs only. Farmers agreed to put 39.8 million acres into conservation use—35.9 million under the PIK programs and 3.9 million under the acreage reduction and paid land diversion.

The total required conservation use of 39.8 million acres, out of a base of 101.2 million, permits combined planting of 61.4 million acres of the corn and sorghum base this year, assuming those not enrolled plant their full bases. Generally, some farmers change their mind between enrollment and planting time, so acres idled will likely be less than indicated by the signup, particularly among producers who enrolled only in the acreage reduction and paid land diversion programs. If these farmers fail to comply, they simply are no longer eligible for any program benefits. However, additional penalties will be levied against farmers who enroll in the PIK program but then do not comply, so there is less likelihood of these farmers dropping out.

A second factor that could increase acreage planted beyond that indicated by enrollment in the program is the planting on farms that are not in the program or are without an established corn base. With the price of corn high relative to soybeans, some land may be shifted from soybeans to corn this year.

Corn Prices Rise When Ending Stocks as a Percent of Use Decline



Based on a special planting survey taken in late April, 58.8 million acres are expected to be planted to corn for all purposes. Silage and forage production and abandonment will likely account for 7-9 million acres, leaving about 50-52 million to be harvested for grain.

When acreage planted is substantially reduced in response to acreage reduction programs, increased per acre yields generally result because farmers idle lower yielding land. Also, because of the acreage reduction, farmers' management and labor are increased relative to the acreage planted, which tends to increase yield. In addition, fertilizer and other inputs are usually stepped up. Given the substantial amount of land taken out of production this year, the yield per acre is expected to exceed last year's record 114.8 bushels, assuming normal temperature and rainfall.

The 1983 corn crop is estimated at about 6.1 billion bushels, almost 30 percent smaller than the record 8.4-billion crop last year. Adding carryover stocks of 3.4 billion bushels would give a total supply of 9.5 billion for the 1983/84 marketing year—1.2 billion less than supply for 1982/83.

The disappearance of corn for 1983/84 is projected at 7.4 billion bushels—over 100 million more than estimated disappearance this year. This use, combined with the smaller total supply, would leave carryover stocks in 1984 of 2.1 billion bushels—slightly over 60 percent of the carryover expected this year. The 1984 carryover stocks would represent 29 percent of use, compared with 47 percent for this fall's carryover. This expected reduction in the stocks/use ratio improves the outlook for all feed grain prices. The price received by farmers for corn in 1983/84 is expected to average $2.65 to $2.90 a bushel, compared with the estimated season-average price of $2.65 for 1982/83.

If 1983/84 supply and use turn out close to the above projections, PIK will have made good progress toward reducing excess stocks. Carryover stocks have averaged 17.5 percent of use during the past 15 years. With use around 7.4 billion bushels, getting back to a ratio of 17.5 percent would require an additional reduction of 700-800 million bushels in 1984/85 carryout stocks, or a little over one-half the stock reduction achieved in 1983/84. To hold the share at 17.5 percent, a substantial increase in use will be required before plantings can return to the 82 million to 84 million acres characteristic of 1976-1982.

Sorghum

January-March Disappearance Down Sharply

Disappearance of sorghum during January-March was 191 million bushels—down 58 percent from the preceding quarter and 16 percent from a year earlier. The decline relative to the preceding quarter is distorted because use during October-December 1982 was overstated. Almost 285 million bushels of sorghum were harvested prior to October 1, 1982. Because free stocks of sorghum were extremely tight, much of the new-crop grain was used during June-September 1982. However, in the supply-disappearance table, this grain is shown as being harvested during October-December 1982, and therefore is reflected in the feed and residual category for that quarter.

The disappearance of sorghum during the first half of 1982/83 was 519 million bushels, or about 46 percent of the marketing year supply. Disappearance a year earlier was 525 million bushels, but it represented 53 percent of last year's smaller available supply.

April 1 Stocks Large, But Free Stocks Small

Use in October-March left 619 million bushels of sorghum on hand April 1, a third larger than year-earlier stocks. However, 84 percent (509 million bushels) were isolated from the market in CCC inventory and the FOR. This left only 110 million bushels of free stocks—slightly more than exports during April-September 1982. Last year, 254 million bushels were isolated from the market on April 1, leaving free stocks of 208 million.

Sorghum stocks on April 1

Item	1982	1983
	Million bushels	
Total stocks	462	619
CCC inventory	38	[1]148
Private	424	571
FOR	216	461
Free	208	110
Under loan	51	13
Other[1]	157	97

[1]Partly estimated.

USDA accepted bids to acquire 148 million bushels of sorghum in April's special procurement program to secure grain for PIK. This will return about 25 million bushels from the FOR to free stocks later this spring or early summer.

The demand for sorghum for domestic feeding and exports, in combination with the tight free supplies, drove the price per bushel above the corn price last October. Since then, prices for both grains have increased, but the price of corn has risen faster than the price of sorghum. In mid-April the per bushel sorghum/corn price ratio was .93, almost down to the long-term average of .91. Last winter, sorghum was overpriced relative to corn, and feeders began to replace sorghum with corn. Unit train shipments of corn were made to Texas to supply cattle feedlots. This shift to corn, along with decreased sorghum exports, has been responsible for the realignment of sorghum prices relative to corn.

Sorghum Reserve Less Likely To Be Triggered Than Corn

Use during the second half of the marketing year will be restricted by tight free stocks. However, reduced prospects for exports have taken some pressure off stocks. New-crop sorghum will be available from the lower valley and coastal bend areas of Texas as early as the first week of July. Even though sorghum plantings are behind schedule in most States, plantings are on schedule in Texas.

The trigger price for Reserve IV sorghum is $3.00 a bushel—95 percent of the trigger price for Reserve IV corn. However, at the end of April, the 5-day adjusted price for sorghum was only 93 percent of the price of corn. Therefore, triggering of the corn reserve does not mean an automatic triggering of the sorghum reserve. Either corn prices will have to move near the trigger for Reserve V ($3.25 a bushel) or demand for sorghum will have to push the price of sorghum up relative to corn. If these adjustments do not occur before mid-July, when new-crop sorghum will be moving to market in increased quantity, the reserve probably will not be triggered. Growing conditions in southern Texas also will be an important factor.

Large Carryover Stock Offsets Smaller Harvest for 1983/84

Carryover stocks of sorghum this fall are expected to be 502 million bushels—200 million more than on hand October 1 last year. Producers reported intentions to plant 12 million acres of sorghum for all purposes this year. Sorghum output is projected to total about 650 million bushels—191 million less than the 1982 harvest. This would bring the total supply of sorghum for 1983/84 to 1.15 billion bushels, almost the same as for this feed year. Total use for 1983/84 is projected at 711 million bushels—75 million more than expected for 1982/83. Most of the increase likely will be in exports, but feed and residual disappearance is expected to rise.

Sorghum prices probably will average higher in 1983/84 than for the current year but lower relative to corn than for the first half of this year. Consequently, the substitution of corn for sorghum that occurred this year is expected to be reversed next year. The average price received by farmers in 1983/84 will likely be between $2.50 and $2.70 a bushel. The average price for 1982/83 will be about $2.50 a bushel.

Barley

Barley Use Up in January-March

Disappearance during March was up 36.1 million bushels from the preceding quarter and 12.4 million from a year earlier. The increase over year-earlier use occurred in the feed and residual category. Exports were down from a year earlier but contributed to the rise in use from October-December.

Barley prices relative to corn prices averaged lower during October-December than during the preceding 9 months. However, this did not seem to stimulate barley feeding, as feed and residual use during October-December dropped below a year earlier and, on the basis of daily rate of use, also dropped below June-September. As corn prices rose during January-March, barley prices also rose, but at a slower rate, making barley more attractive for feeding relative to corn. This appears to be an important factor in the 43-percent increase in feed and residual use of barley during January-March, which led to the highest feeding rate for this quarter since 1972.

Total Supply for 1983/84 May Be Up Slightly

About 80 million bushels of barley are likely to be used during April and May, leaving carryout stocks of 220 million bushels—70 million more than on June 1 last year. However, about 100 million bushels of this year's carryout are tied up in the FOR and CCC inventory, compared with about 25 million last year. Consequently, free stocks will be slightly smaller than a year ago.

Farmers reported intentions to plant 10.6 million acres of barley this year, of which 0.5 million is for conservation use. The yield per acre is not expected to equal last year's record of 57.3 bushels. The harvest is projected at about 510 million bushels—slightly under the 1982 harvest of 522 million bushels.

Adding production to carryover stocks, and allowing for about 10 million bushels of imported barley, gives a projected supply of 740 million bushels for 1983/84—about 58 million larger than for 1982/83.

Total use for 1983/84 is projected at 500 million bushels, almost 40 million more than estimated use for 1982/83. Livestock feeding and exports are expected to increase in 1983/84.

Barley prices may average higher during 1983/84 in response to the stronger corn market and higher loan rate. However, the percentage of increase in barley prices over 1982/83 is not expected to match the rise in corn prices.

Oats

Oat Feeding Responds to Price Adjustment

During 1981/82, oats were in tight supply and their price rose substantially above their feeding value relative to corn. Even though the feeding value of oats per pound for most livestock is 90 percent that of corn, the price of oats per pound was 36 percent above the price of corn per pound in the spring of 1982.

The 21-percent increase in oats production from 1981 to 1982 eliminated the tight supply condition and the price of oats declined. From April-May to October-December, the average price received by farmers dropped 30 percent. But corn prices declined by 18 percent, so oat prices were still high relative to corn. However, the drop in oat prices stimulated an increase in the feeding of oats during October-December, relative to a year earlier.

During January-March, the price of corn rose faster than the price of oats, so per pound they averaged about the same for the quarter. Feeding of oats in January-March rose seasonally from October-December and also was 12 percent above the corresponding quarter of last year.

Oat prices did not rise with corn prices during April, so the per pound price of oats dropped 13 percent below that of corn, to the lowest level relative to corn since 1973. Oat feeding is likely to increase in response to this latest price adjustment. Feed and residual disappearance for April-May is expected to be over 60 million bushels. Exports and FSI use may account for a little over 40 million bushels, because of seed used on the large number of conservation acres being planted to oats as a cover crop. This brings total use for the period to about 100 million, almost 17 percent above a year earlier. This would push total use for the crop year to 540 million bushels, leaving a carryover of 232 million—53 percent above last year's 152 million and the largest carryover since June 1, 1979.

Slightly Smaller Supply In Prospect for 1983/84

Farmers are expected to seed about 21.3 million acres of oats this year, of which 9 million will be as cover crop on conservation use acres. Harvested acreage is expected to be down from 10.6 million harvested in 1982, and yields are not expected to equal the record 58.4 bushels per acre of last year. The 1983 crop is projected at 485 million bushels—about 130 million less than last year. The smaller harvest would more than offset the large 1982/83 carryover, resulting in a total supply of about 720 million bushels for 1983/84, about 7 percent less than in 1982/83.

Strong Dollar and Favorable Prices Attract Imports

The recovery in oat prices last fall and winter, along with the strength of the dollar in international trade, has led U.S. buyers to import oats from Canada and Argentina. For example, with the U.S. dollar currently worth about $1.22 Canadian, and with number 2 oats selling for about $1.50 U.S. at Toledo, a bushel of Canadian oats delivered to Toledo would be worth about $1.83 in Canadian dollars. Number 2 feed oats at Thunder Bay, Canada, was worth about $1.62 Canadian.

Imports of oats and oat products, converted to a whole grain basis, rose from 200,000 bushels last October-December to 1.6 million in January-March. Imports in the past quarter equaled those for the entire 1981/82 crop year. The same relative price conditions likely will hold imports above a year earlier during this spring and summer.

Hay

Hay Supply Likely To Hold Steady

The disappearance of hay for May-December 1982 amounted to 69.7 million short tons, 1 percent more than a year earlier. Even though pasture and range conditions averaged better in 1982 than the preceding year and a record hay crop was harvested in 1982, the farm prices of hay averaged $68.70 a ton for this past May-December, compared with $66.09 a year earlier. This price differential likely reflects the larger proportion of alfalfa and alfalfa mixtures consumed during the most recent period compared with a year earlier.

Hay stocks this past January 1 totaled 108 million tons, up 8.3 million from a year earlier. The roughage-consuming population this year is down about 1 percent from last year, mainly because of a 2-percent decrease in the beef cattle inventory. The winter just completed was considerably milder than the previous winter, but cold temperatures and heavy precipitation through much of April prolonged the need for supplemented feeding of livestock. Hay feeding for January-April this year reached 79 million tons, about 4.5 million more than for the same period last year. This left a carryout stock of 29.0 million tons—3.8 million more than last year, but still under the record 33.3 million on hand May 1, 1980.

Producers have reported intentions to harvest hay from 60.7 million acres, same as the area harvested last year. If the yield is near trend this year, the hay crop may come in about 5 million tons below last year, when the yield was a record 2.51 tons per acre. However, soil moisture conditions this year are favorable for hay production. With the larger carryover stocks, the hay supply for 1983/84 may be near or only slightly under 1982/83.

FEED DEMAND

The January-March quarter turned out to be a strong one for livestock feeding. As of January 1, the number of cattle on feed in the 13 reporting States totaled 10.3 million, up 14 percent from a year earlier. The increase in cattle feeding was in part offset by fewer hogs being fed. On December 1, 1982, the number of market hogs weighing less than 180 pounds was down 8 percent from a year earlier. However, weights of barrows and gilts slaughtered during January-March averaged above a year earlier, indicating more feed used per marketed animal.

Broiler, turkey, and milk production also accounted for more feed disappearance during January-March, both in numbers and in the rate fed per animal. Feed consumed by sheep and horses and mules also slightly exceeded a year earlier. Besides hogs, the other livestock and poultry categories using less feed were layers and nonfed beef.

Feed Use Expected To Hold Above a Year Earlier

Feed use through the spring and summer is expected to stay above a year earlier. The number of cattle on feed in the 13 reporting States as of April 1 was up 4 percent from a year earlier. Placements on feed this spring are expected to be up as cattle move off of conservation use acreage in the wheat PIK program.

The 5-percent increase in sows farrowed during December-February, in conjunction with a 5-percent increase in pigs saved per litter, resulted in a 10-percent gain in the pig crop over a year earlier. These pigs will have their major impact on feed demand during April-August. If hog producers carry out their reported intentions to farrow 8 percent more litters during March-May, hog production will continue to add to demand for feed grains through the end of the year.

Broiler production and turkey production are both expected to be up seasonally during April-June and above a year earlier as well. Broiler production is expected to level off during July-September, while turkey production will continue to increase and exceed the year-earlier quarters. Milk production will likely account for slightly more feed use during the April-June quarter than it did last year, although grain feeding likely will be down seasonally from January-March. During the second half of the year, the use of feed in dairying will about equal year-earlier use. Egg production may require less feed this spring and summer than a year earlier.

Livestock prices were high relative to feed grain prices last fall when the latter were at their seasonal low, and this was conducive to increased feeding per animal unit. With the recovery in feed grain prices this spring, livestock/feed price ratios have declined, and a decrease in the feeding rate may offset part of the increase in livestock and poultry numbers.

FOOD AND INDUSTRIAL DEMAND

FSI Demand Remains Strong

Food, seed, and industrial corn use continued to rise during January-March and was 15 percent above a year earlier. The preceding October-December period had shown a 13-percent increase over the previous year.

Growing demand for fuel ethanol accounted for over 70 percent of the increase during January-March, and continued strong demand for high fructose corn syrup (HFCS) accounted for the remainder.

Food, seed, and industrial use of corn[1]

Products	1980/81	81/82	82/83*	83/84*
		Million bushels		
HFCS	160	185	215	240
Alcohol[2]	70	125	180	200-240
Glucose and dextrose	182	185	186	187
Dry milled for food & beer[3]	173	172	177	176
Starch	130	125	125	128
Seed	20	19	17	19
Total	735	811	900	950-990

[1]Year beginning October 1. [2]Fuel, industrial, and beverage alcohol. [3]Cornmeal, grits, flour, cereal, snacks, and specialty foods.
*Forecast.

If the present trend holds, FSI use will exceed the 900 million bushels presently forecast for 1982/83. In 1983/84, continued strength in the fuel ethanol and HFCS markets will bring FSI use up to 970 million bushels and possibly as high as 990 million.

Boost in Beverage Use Keeps HFCS the Major Product

HFCS production alone consumes around 24 percent of all corn used for FSI purposes. The beverage industry accounts for over 50 percent of HFCS sales and continues to be the source of major increases in HFCS use.

A recent decision by PepsiCo, Incorporated, to replace 50 percent of sugar used in its canned and bottled product with HFCS will likely bring the wet-milling industry near full capacity operations this year and next.

Excess capacity for HFCS production had forced wet-millers to lower prices to maintain their market shares while waiting on the Pepsi decision. HFCS has always been priced less than sugar, but the discount varies depending on market factors. Recently, HFCS prices have been 40 to 50 percent below sugar prices. Now that Pepsi has made this major adjustment in its formula, strong demand and higher corn prices will combine to raise HFCS prices.

Industry analysts estimate the Pepsi decision will increase corn use by 15 to 20 million bushels over the next 2 years. Earlier this year the Coca-Cola Company decided to increase use of HFCS from 50 to 70 percent in its fountain syrups. This gain is expected to increase corn use 6 million to 8 million bushels.

Fuel Ethanol Demand Increasing

Fuel, industrial, and beverage alcohol has been rapidly gaining on HFCS use and may consume an equal amount of corn in 1983/84.

All but 25 to 40 million bushels of the alcohol total is used in fuel ethanol production (see adjoining table). In 1982, more than 80 percent of fuel ethanol was produced by wet-millers, but in 1983 dry-millers may produce around 40 percent of the total.

Sales of ethanol-enhanced fuel were around 2.5 percent of total gasoline sales in 1982 and are expected to exceed 4 percent in 1983. The Federal tax exemption for gasohol and a growing number of State tax exemptions have kept ethanol production profitable despite falling gasoline prices and increasing corn prices.

The market price of fuel ethanol presently fluctuates with gasoline prices, but in the future it is expected to follow higher prices of other octane enhancers. This is because capacity is now reaching a level where gasoline companies are assured of adequate supply. With demand for premium unleaded gasoline increasing, ethanol use will increase.

Rising corn prices are expected to lower the profits of major ethanol producers and may even push out some small, marginal producers. Feedstock costs generally represent 60 to 70 percent of the total production costs of fuel ethanol. However, most large plants should be able to survive corn prices up to $3.50 per bushel. As gasoline prices level off and the high-demand summer season approaches, ethanol production is expected to continue to grow in line with increased gasoline use.

WORLD COARSE GRAIN SITUATION

Foreign coarse grain production rebounded in 1982/83 because of larger output in Europe and China. The Soviet crop is estimated at 86 million tons, up a fifth from 1981. Eastern Europe and the European Community (EC) harvested record crops.

Production fell 14 percent—9 million tons—in major foreign exporting countries, largely because of bad weather. Due to severe drought, South Africa's crop is estimated below 5 million tons, down from 9 million last year and 15 million in 1981. Production was down 44 percent in Australia, 18 percent in Thailand, and 10 percent in Argentina. On the other hand, record yields boosted Canada's coarse grain output despite reduced area.

Little Recovery in Use Likely in 1982/83

In the developed countries, economic recession has stifled growth in livestock output. Feed use of coarse grains may decline 2 percent in the foreign developed countries. Feed use may dip slightly in the EC, while use of protein meal will grow about 3 percent. Hog numbers are stable, and the expansion in the EC poultry sector has slowed markedly.

Coarse grain supply and use

Region	1981/82	Estimated 1982/83	Forecast 1983/84
		Million metric tons	
World			
Production	765.0	781.5	743.7 ± 25
Utilization	733.0	743.8	777.4 ± 16
Feed use	443.1	452.5	465.5 ± 12
Exports[1]	107.1	96.5	107.0 ± 6
Carryover stocks	112.5	150.1	116.5 ± 13
World less U.S. & USSR			
Production	444.1	440.6	454.8 ± 15
Utilization	481.3	484.8	503.1 ± 10
Feed use	245.0	249.9	252.5 ± 5
Exports[1]	48.5	40.8	45.8 ± 3
Carryover stocks	41.4	41.8	39.5 ± 3

[1]Marketing years.

In Spain, hog and poultry industries are retrenching after overproducing in 1982. Coarse grain feeding may drop 8 or 9 percent in 1982/83. In Japan, feed use of coarse grains may decline 2.5 percent because an estimated 860,000 tons of rice is being fed and demand for livestock products is weak. No increase in Canada's feed use is expected.

Soviet use is not increasing this year because of large supplies of poor-quality wheat. With a record crop, China's disappearance will be up 4 percent in 1982/83. In Eastern Europe, use will rebound because of improved 1982 grain crops. The additional supplies will be used to increase poultry production and maintain hog inventories.

Crop shortfalls in India, Africa, and Mexico will prevent an increase in coarse grain use in the developing countries. Feed use may rise less than 2 percent, compared with an 8.6-percent jump in 1981/82. Feed use may decline a tenth in Mexico because of short supplies and very weak consumer demand for livestock products.

Economic recession is also depressing use in other Latin American countries.

Feed use in North Africa increased 8 percent last year and may increase 15 percent this year because of government encouragement of livestock operations. Feed use is estimated up 5 percent in the Middle East. The expansion in livestock feeding is continuing in East and Southeast Asia. Feed use may rise 27 percent in Indonesia, 10 percent in South Korea and 13 Malaysia, and 5 percent in Taiwan.

World coarse grain trade is forecast to decline 15 million tons in 1982/83 (July-June), to the lowest level in 5 years. Soviet imports are down sharply, and imports of Western and Eastern Europe are also declining. Imports of the developing countries may expand a fifth.

USSR coarse grain imports are forecast at 12 million tons, compared with 26 million in 1981/82. Wheat imports may reach a record 21 million tons because of abundant supplies of wheat on the world market and quality problems with the 1982 Soviet wheat harvest. Most of the drop in coarse grain imports will occur in corn. The Soviets harvested a good corn crop in 1982, and the recent rise in corn prices made sorghum and barley more attractive to Soviet grain buyers.

Because of continuing foreign exchange and credit constraints, Eastern Europe's coarse grain imports may drop to 3.7 million tons, down from 7.2 million last year and 10.7 million in 1980/81. China's coarse grain purchases rebounded sharply with low corn prices—relative to wheat—earlier this year.

Imports of the developed countries may decline more than a tenth in 1982/83. EC imports are down further because of abundant domestic grain supplies and weak demand. Imports of non-EC Western Europe are also down because of better crops and weak demand for livestock feeding. No increase is foreseen for Japan's total imports; corn purchases are up, but sorghum imports are down.

World coarse grain imports[1]

Regions	1980/81		1981/82		1982/83*		1983/84*
	From U.S	Total	From U.S.	Total	From U.S.	Total	Total
				Million metric tons			
Western Europe	18.2	20.5	18.5	22.7	12.0	17.5	17.8 ± 1
Japan	16.2	18.9	14.2	18.3	14.0	18.3	18.6
Centrally planned	13.5	29.6	14.4	34.1	6.8	18.4	22.8 ± 5
Mexico	7.7	8.2	1.6	2.1	5.0	5.3	5.0 ± 1
Other Latin America	4.7	5.9	2.6	4.1	2.8	4.1	4.0
North Africa and Middle East	5.0	7.6	3.8	9.2	4.4	9.6	10.0 ± 1
East and Southeast Asia[2]	5.4	8.2	5.3	8.5	6.8	10.3	10.2 ± 1
Other developing	1.0	2.3	.8	2.2	.4	2.1	2.0
Other and unaccounted	.7	4.3	.2	2.2	.6	2.4	3.4
Total	72.4	105.5	61.4	103.4	52.8	88.0	93.8 ± 6

[1]July-June years. [2]Excludes Japan and China. *Forecast.

Mexico is expected to import about 5.3 million tons of coarse grains, mostly under U.S. CCC guarantees. Imports of other developing countries will continue to increase. South Korea's imports may expand 1 million tons, and gains are also expected for Saudi Arabia, Taiwan, and Egypt.

U.S. Maintains Share of Reduced World Market

The U.S. share of world trade is estimated at 60 percent, slightly above 1981/82's unusually low 59 percent. Major foreign exporters—except Canada—harvested reduced crops in 1982/83. Nevertheless, U.S. exports were 5-1/2 million tons below a year earlier during July-April, and July-June shipments are forecast down almost 9 million tons.

U.S. coarse grains will benefit from reduced competitor supplies into 1984. Argentine exports in the 1983/84 marketing year are projected to decline a fifth to around 10.8 million tons. South Africa, which exported 5 million tons of corn in the past year, will import corn during 1983/84—perhaps 2 million tons or more. Australia's exports may decline more than 2 million tons. However, EC barley exports will remain heavy.

Foreign Production Prospects Improved for 1983/84

Early prospects point to increased foreign coarse grain production in 1983/84. Conditions for winter grains were generally favorable across the Northern Hemisphere. Foreign production may increase to 555 million tons (plus or minus 17 million), somewhat above trend. The Soviet crop is forecast to rebound to around 100 million tons. In other European countries, output may not match excellent 1982 outturns. Canadian production may also decline, because of reduced area. Mexico's production is likely to rebound, and increases are foreseen for China, Brazil, India, and most other developing countries.

With the anticipated gain in Soviet output and improved economic prospects, foreign coarse grain use may expand 4 to 7 percent next year. Use may decline slightly in the EC because of the proposed wheat feeding program and weak demand for livestock products. Small gains may occur in other developed countries. Coarse grain use may rise 4 percent in the developing countries, with feed use also up 4 percent.

Initial projections place world coarse grain trade at 94 million tons (plus or minus 6 million) in 1983/84 (July-June), compared with an estimated 88 million this year. Imports of the developing countries, which increased a fifth this year, may rise slightly next year. Shipments to Africa, South Korea, and Taiwan are forecast up. South Africa is expected to import 2 million tons of corn and possibly some sorghum to maintain domestic consumption following last spring's severe drought. Imports of other developed countries may recover slightly in 1983/84.

Imports of the centrally planned countries are highly uncertain. Despite the forecast of improved production, the USSR may import somewhat more than 1982/83's reduced volume. The Soviets may use more feed grains in animal feed in place of wheat. China's imports may rise a fifth because of expanding livestock feeding. Eastern European imports are forecast to increase slightly from 1982/83's estimated 3.9 million tons—the lowest in a decade.

The U.S. share of world trade may improve in 1983/84 (July-June) because of limited supplies in competing countries. Thus, U.S. exports may rebound from this year's disappointing movement. July-June shipments are forecast at 59 million tons, up from the 53 million expected to move this year.

South Africa may export 1 million tons of corn by June 1984 from next spring's crop, and Argentine corn exports may decline. However, Thailand and Australia may export more next year, and the EC will be under pressure to export more barley. Thus, U.S. feed grains will face stiff competition in Eastern Europe, the USSR, North Africa, and the Middle East.

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Regional Feed Consumption Estimates

George Allen and Robert Green

Agricultural Economists
National Economics Division
Economic Research Service

ABSTRACT: This article compares regional concentrate feed consumption in 1971/72 with that in 1981/82, for dairy cattle, cattle on feed, hogs, poultry, and all other livestock. Total feed consumption for the United States in 1981/82 was down about 4 million tons from 1971/72. This decline can be attributed entirely to a drop in cattle on feed, which occurred primarily in the Pacific and Mountain regions, and more recently in the Southern Plains. Dairy and poultry feed use across the country has been increasing. The proportion of concentrate feed supplies going to dairy and poultry has increased, especially in the Sun Belt. Beef producers in the Sun Belt are relying more on roughage feed supplies.

KEYWORDS: Concentrate feed consumption, dairy, cattle on feed, hogs, poultry, other livestock, production regions, corn, feed grain, livestock inventory.

Annual U.S. feed consumption (including concentrates and roughages) during the 1971-81 decade averaged slightly more than half a billion tons in feeding value of corn. In volume, this weight translates into about 18 billion bushels of corn. Estimates of annual consumption of corn itself have averaged slightly below 4 billion bushels, or around 22 percent of total feed consumption. Other grains contributed 4 percent and byproduct feeds contributed around 6 percent. The remaining feeds—about two-thirds—are made up of harvested roughages, pastures, and feeds which animals harvest for themselves.

This article shows concentrate feed consumption for each of the 10 farm production regions[1] for feed years 1971/72 and 1981/82. Consumption changes over the decade and among the regions reflect changes in livestock inventory composition and shifts in production practices and marketing channels throughout the United States.

Livestock and poultry are grouped into 5 major categories for comparison. Dairy, the first, is composed of milk cows, replacement heifers, dairy calves, and dairy bulls. The second category, cattle on feed, includes all cattle earmarked for slaughter, as opposed to those retained for breeding. The third category is hogs, which consume the largest share of the concentrate feeds. The fourth category is poultry, including layers, layer replacements, broilers, and turkeys. The fifth category, "all other," includes all farm and nonfarm livestock that are not in the first four categories, such as horses and mules, sheep, fish, ducks, geese, domestic pets, and "other beef cattle." The latter are separated from cattle on feed because of the difference in consumption of concentrate feed. For other beef cattle, concentrate feed supplements a roughage-based ration. The concentrates fed to other beef also have a much higher average crude protein content than those given cattle on feed.

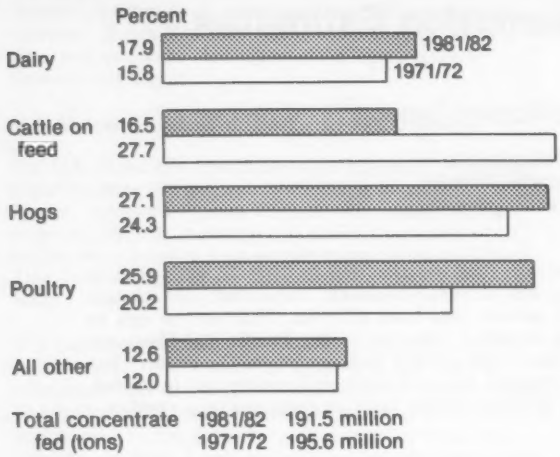
Farm Production Regions

U.S. Feed Use

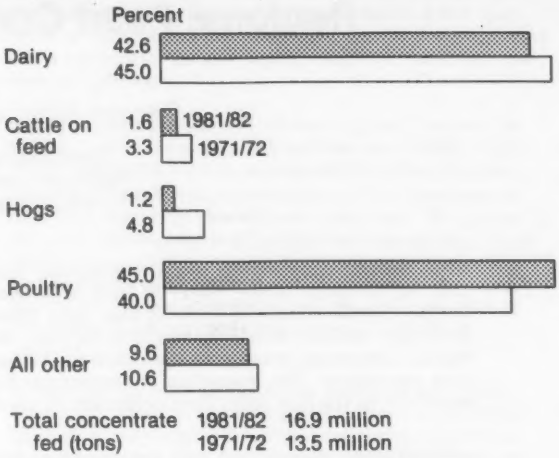
Total feed consumption for the United States in 1981/82 was 191.5 million tons, down about 4 million from 1971/72. This decline can be attributed entirely to fewer cattle on feed (their feed consumption was down 40 percent), since feeding to the other categories increased. Most year-to-year changes in feed consumption are effected by hog and beef cattle feeding activities. Dairy and poultry feed use across the country have been increasing. The "all other" category consumes a small proportion of the total and does not have much effect on total consumption.

[1]Production regions and States are as follows: Northeast: ME, NH, VT, MA, RI, CT, NY, NJ, PA, DE, MD; Lake States: MI, WI, MN; Corn Belt: OH, IN, IL, IA, MO; Northern Plains: ND, SD, NE, KS; Appalachian: VA, WV, NC, KY, TN; Southeast: SC, GA, FL, AL; Delta States: MS, AR, LA; Southern Plains: OK, TX; Mountain: MT, ID, WY, CO, NM, AZ, UT, NV; Pacific: WA, OR, CA.

United States



Northeast



Regional Feed Use

Regional estimates of concentrate feed consumption reflect the distribution of categories of livestock among the 10 farm production regions. Livestock inventories determine the kind of feeds consumed in a particular region. Changes in feed consumption within and between regions are usually gradual and tend not to reverse themselves to earlier patterns. Because of the structural and operating characteristics of hog and fed cattle industries, they are considered major "demand shifters" of aggregate feed demand. Therefore, regions with relatively little hog and fed cattle production show more stability year to year.

Major production centers for fed beef have declined in the Pacific and Mountain regions. The Southern Plains fed beef industry may also be declining. These changes suggest that concentrate feed supplies in these regions may not be sufficient to support a fed cattle industry which is dependent upon local feed grain supplies.

As population growth in the Sun Belt areas continues to exceed the national rate, there is a need to produce a wider variety of livestock products in these regions. Dairy and poultry industries have expanded their operations to meet this demand. As a result, the proportion of concentrate feed supplies going to dairy and poultry in these regions has increased over the decade and beef producers, because of increased competition for feed supplies, have had to rely more on roughage.

Northeast

In 1971/72, the primary Northeast livestock industries were dairy and poultry. Through the decade, dairy and poultry have maintained their position and there has been an increase in the number of horses. There is relatively little hog and fed cattle production, so the regional feeding pattern has been stable. The Northeast's share of total U.S. feed consumption for 1981/82 was up 2 percent from 1971/72. Increases in feed consumed by poultry and horses have more than offset reductions in feed consumed by dairy, hogs, and fed cattle.

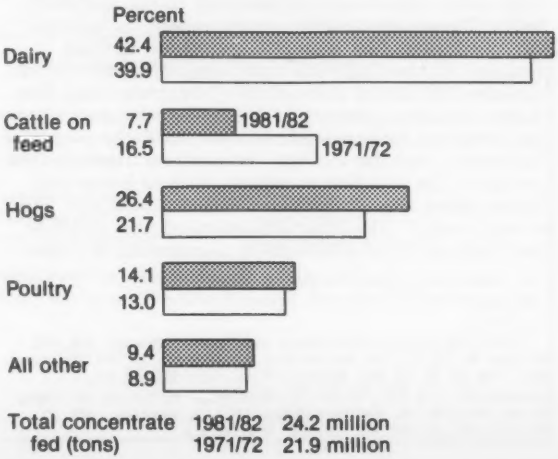
Lake States

The Lake States' share of total U.S. feed consumption for 1981/82 was 2 percent above 1971/72. Dairy, the primary livestock industry, claimed about 40 percent of the region's total feed use in both years. Further, about 30 percent of U.S. dairy feeds were consumed in the Lake States in both years.

Although poultry is a relatively small part of the livestock industry in the Lake States, poultry feed use increased 20 percent during the 10- year period. Turkeys, up 44 percent, have led this increase.

About 6 to 7 percent of U.S. fed beef is produced in the Lake States. Cattle feeding has shown greater yearly fluctuations than other categories of livestock.

Lake States



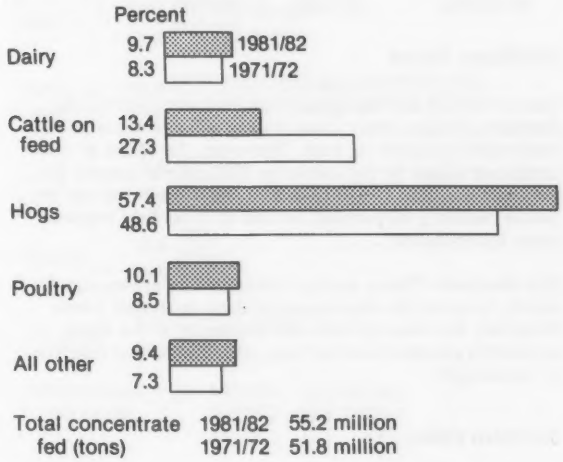
Corn Belt

Feed use in the Corn Belt has maintained a relatively stable share of 28 percent of total use in the United States. About 56 percent of U.S. hog inventory is located in the Corn Belt, and hog feeding claims over 50 percent of the region's total feed consumption.

Feed consumed by cattle on feed in the Corn Belt during 1981/82 was less than 50 percent of the 1971/72 level. Nationally, the decline was 42 percent. This indicates that the fed cattle industry declined proportionately more in the Corn Belt than in the United States.

For both 1971/72 and 1981/82 feeding years, poultry and dairy consumed less than 20 percent of Corn Belt feed, while the "all other" livestock category used slightly more than 8 percent.

Corn Belt

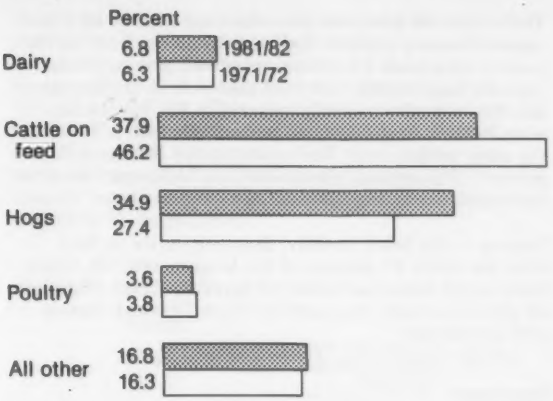


Total concentrate fed (tons)	1981/82	55.2 million
	1971/72	51.8 million

Northern Plains

Cattle on feed and hogs account for about three-fourths of total concentrates fed in this region. If one includes other beef cattle, nearly 90 percent of the total concentrate feed use is accounted for. Since the livestock industry in the Northern Plains has been dominated by fed cattle and hogs, feed consumption there was subject to significant year-to-year changes.

Northern Plains

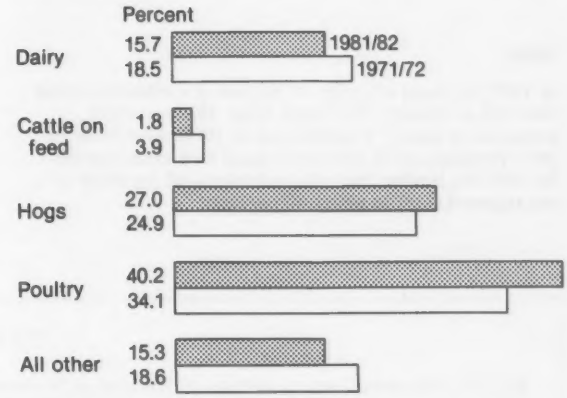


Total concentrate fed (tons)	1981/82	20.7 million
	1971/72	25.0 million

Appalachian

Appalachian livestock consume about 7 percent of total U.S. concentrate feeds. In 1971/72, about 13 million tons were fed, with about 2.4 million going to dairy, 4.4 million to poultry, 0.5 million to cattle on feed, 3.2 million to hogs, and 2.9 million to other livestock (principally horses, mules, and other beef cattle). By 1981/82, feed consumption in this region totaled 15.3 million tons. Dairy feed consumption remained at 1971/72 levels, while cattle feed consumption declined to 0.3 million tons. Poultry feed consumption climbed to 6.2 million tons, a 41-percent increase over 1971/72. Broilers led this increase with a 56-percent gain.

Appalachian



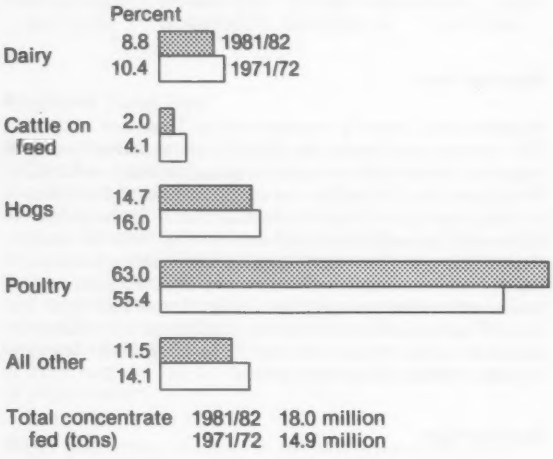
Total concentrate fed (tons)	1981/82	15.3 million
	1971/72	12.9 million

Southeast

The Southeast produces more than one-fifth of all U.S. eggs and nearly a third of all U.S. broilers. In 1971/72, poultry consumed 8.2 million tons, well over half this region's total concentrate feed use. Broiler production has shown a steady yearly increase in the Southeast, with 1981/82 feed use up 86 percent over 1971/72. Over the same period, layer feed consumption increased 32 percent. Throughout the decade, the Southeast remained the region producing the most eggs and broilers.

Coming in far below poultry, hogs and cattle on feed were fed about 20 percent of the total in 1981/82, while dairy cattle consumed about 10 percent. There was modest growth in feed consumed by these livestock classes over the decade.

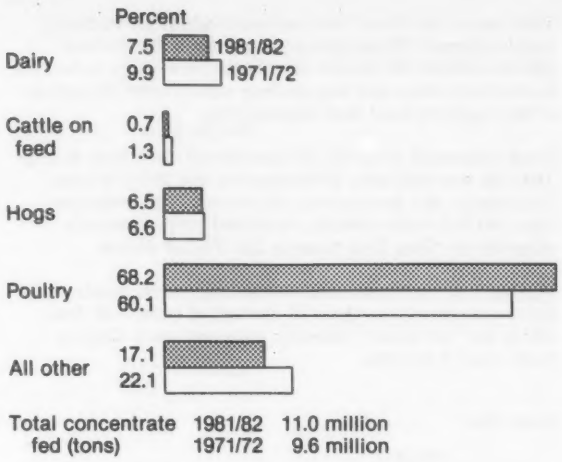
Southeast



Delta

In 1971/72, 6 out of every 10 pounds of concentrate feed were fed to poultry. Ten years later, this ratio had increased to nearly 7 pounds out of 10. Broiler feeds in 1971/72 made up 30 percent of total feed consumption. By 1981/82, broiler feed use had increased its share of the regional total to about 40 percent.

Delta

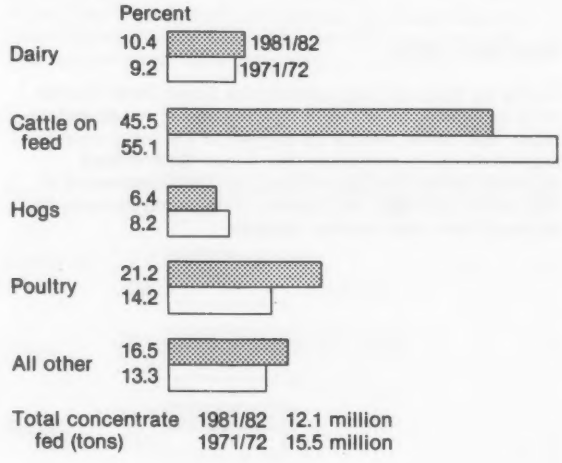


Southern Plains

Cattle on feed are the major livestock category in the Southern Plains, with about half of all concentrates fed consumed by cattle on feed. However, the share of concentrates taken by fed cattle in 1981/82 was nearly 36 percent less than in 1971/72, and the drop in use for fed cattle caused a 22-percent decline in total feed concentrate consumption.

The Southern Plains poultry industry has grown significantly to meet the region's expanding consumer needs. However, the same growth did not occur in the dairy industry's concentrate feed use, which has been relatively unchanged.

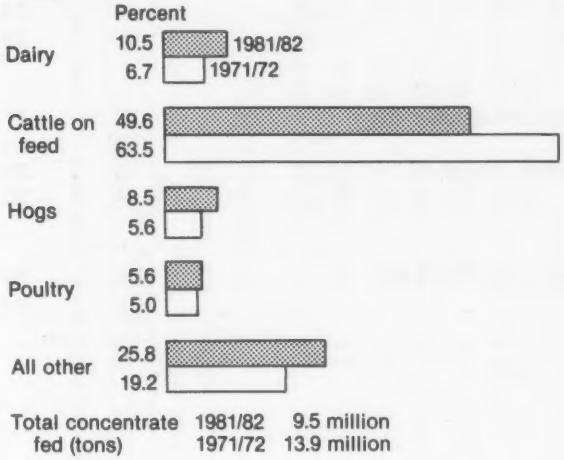
Southern Plains



Mountain

About 12 to 15 percent of U.S. beef feed consumption occurs in the Mountain region. In most years, cattle feeding approaches three-fourths of all concentrate fed. During 1971/72, about 14 million tons of feed concentrates were consumed in the region. Of this, slightly more than 10 million tons were fed to all beef cattle, with cattle on feed receiving 8.8 million tons. Dairy cattle consumed about 1.5 million tons of feed concentrates in 1971/72, and hogs were fed nearly 0.8 million tons. Ten years later, total feed consumption had dropped 32 percent to about 9.5 million tons. Beef cattle feeding had declined by an estimated 44 percent. Cattle on feed use was estimated at 4.7 million tons, 47 percent below 1971/72. However, dairy animals showed an increase of 7 percent in consumption.

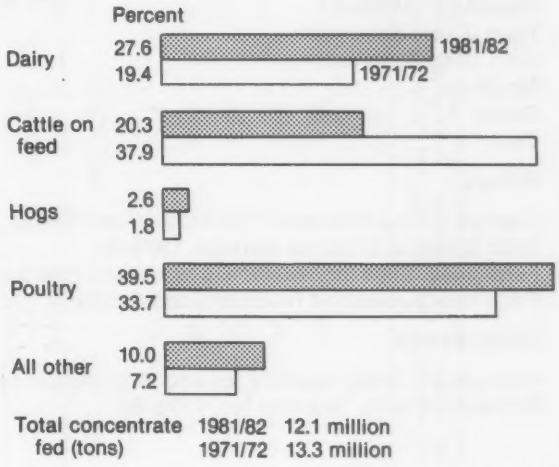
Mountain



Pacific

Dairy and poultry have been the leading livestock industries in the Pacific region. This has resulted in relatively stable concentrate feed consumption during the decade. Dairy feed use increased by 29 percent from 1971/72 to 1981/82. This was offset by a decline in use by cattle on feed; their consumption totaled 2.4 million tons during 1981/82, less than half the 5 million tons estimated for 1971/72. Feed use for poultry (predominantly layers) was 4.8 and 4.5 million tons for 1981/82 and 1971/72, respectively.

Pacific



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LIST OF TABLES

	Table	Page
Supply and Disappearance		
Annual: 1978-83		
Feed grains (marketing year)	1	17
Corn	2	18
Sorghum	3	19
Barley	4	20
Oats	5	21
Quarterly: 1978-83		
Feed grains (feed year)	6	22
Corn (marketing year)	7	23
Sorghum	8	24
Barley	9	25
Oats	10	26
Prices		
Average prices received by farmers, United States, by months, 1978-83	11	27
Cash prices at principal markets, 1978-83	12	28
Feed price ratios for livestock, poultry, and milk by months, 1978-83	13	29
Price trends, selected feeds and corn products	14	30
Other Feeds		
High-protein feed: quantity fed and high-protein animal units, 1975-82	15	31
Processed feeds: quantity fed, 1975-82	16	31

Table 1.--Feed grains: marketing year supply, disappearance, area, and prices, 1978-83 1/

Year 2/	Supply				Disappearance							Ending stocks		
					Domestic use									
	Beginning stocks	Production	Imports	Total	Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 3/	Total
	Million metric tons													
1978/79	41.4	221.5	0.3	263.2	14.4	5.1	1.4	135.9	156.8	60.2	217.0	3.7	42.5	46.2
1979/80	46.2	238.2	0.3	284.7	15.7	5.2	1.4	138.7	161.0	71.3	232.3	7.7	44.7	52.4
1980/81	52.4	198.0	0.3	250.7	17.1	5.4	1.3	123.0	146.8	69.3	216.1	7.1	27.5	34.6
1981/82	34.6	248.5	0.3	283.4	18.9	5.5	1.4	127.9	153.7	58.6	212.3	8.9	62.2	71.1
1982/83 4/	71.1	255.0	0.3	326.4	20.3	6.5	1.4	134.3	162.5	55.7	218.2	34.5	73.7	108.2
1983/84*	108.2	188.3 (±17)	0.3	296.8 (±17)	---	29.9 (±1)	---	132.9 (±11)	162.8 (±11)	61.1 (±7)	223.9 (±15)			72.9 (±15)

Year 2/	Area				Yield per harvested hectare	Index	Government support program
	National program	Set-aside and diverted	Planted	Harvested for grain		Average price received by farmers 5/	Total payments to participants
	Million hectares				Metric tons	1977=100	Million dollars
1978/79	39.4	3.4	50.3	42.7	5.19	113	6/ 1,023
1979/80	44.3	1.9	48.1	41.5	5.74	125	6/ 247
1980/81	42.7	---	49.1	41.1	4.82	154	7/ 412
1981/82	42.5	---	50.0	43.3	5.74	123	8/ 423
1982/83 4/	---	1.3	49.3	43.3	5.89		8/ 416
1983/84							6/ 1,418

1/ Aggregated data on corn, sorghum, barley, and oats. 2/ The marketing year for corn and sorghum begins October 1; for oats and barley June 1. 3/ Includes total Government loans (original and reseal). 4/ Estimated. 5/ Excludes support payments. 6/ Deficiency, disaster, and diversion payments. 7/ Disaster payments. 8/ Deficiency and disaster payments. *The probability is 2 out of 3 that the final outcome will be within this range.

Table 2.--Corn: marketing year supply and disappearance, area, and prices, 1978-83

Year beginning October 1	Supply: Beginning stocks	Supply: Production	Supply: Imports	Supply: Total	Disappearance: Domestic use: Food	Alc. beverages 1/	Seed	Feed and residual	Total	Exports	Total disappearance	Ending stocks Sept. 30: Govt. owned	Privately owned 2/	Total
	Million bushels													
1978/79	1,111.4	7,267.9	1.2	8,380.5	531.2	70.0	19.5	4,322.8	4,943.5	2,133.1	7,076.6	99.7	1,204.2	1,303.9
1979/80	1,303.9	7,938.8	1.1	9,243.8	582.8	72.3	20.0	4,518.6	5,193.7	2,432.6	7,626.3	256.3	1,361.2	1,617.5
1980/81	1,617.5	6,644.8	1.2	8,263.5	641.8	73.6	20.2	4,138.7	4,874.3	2,355.2	7,229.5	237.8	796.2	1,034.0
1981/82	1,034.0	8,201.6	1.2	9,236.8	709.4	82.7	19.4	4,172.5	4,984.0	1,966.9	6,950.9	302.4	1,983.5	2,285.9
1982/83 3/	2,285.9	8,397.3	1.0	10,684.2	765.2	120.5	14.3	4,400.2	5,300.2	1,950.0	7,250.2	1,225.0	2,209.0	3,434.0
1983/84*	3,434.0	6,050.0 (+575)	1.0	9,485.0	- - -	970.0 (+ 25)	- - -	4,300.0 (+ 350)	5,270.0 (+ 365)	2,100.0 (+ 250)	7,370.0 (+ 550)			2,115.0 (+ 550)

	Area: National program	Set-aside and diverted	Planted	Harvested for grain	Yield per harvested acre	Average prices: Received by farmers 4/	St. Louis No. 2 Yellow	Omaha No. 2 Yellow	Gulf Ports No. 2 Yellow	Government support program: National average loan rate	Target price	Total payments to participants
	Million acres				Bushels	Dollars per bushel						Mil. dol.
1978/79	76.2	6.1	81.7	71.9	101.0	2.25	2.51	2.28	2.81	2.00	2.10	6/ 683
1979/80	85.7	2.9	81.4	72.4	109.7	2.52	2.73	2.49	3.02	2.10	2.20	7/ 126
1980/81	84.1	---	84.0	73.0	91.0	3.11	3.35	3.13	3.54	2.25	2.35	8/ 280
1981/82	80.5	---	84.2	74.7	109.8	2.50	2.61	2.46	2.83	2.40	2.40	8/ 92
1982/83 3/	---	2.1	81.9	73.2	114.8	2.65	5/ 2.68	5/ 2.54	5/ 2.84	2.55	2.70	9/ 290
1983/84						2.65-2.90				2.65	2.86	7/ 1,115

1/ Malt beverage and distilled liquor products converted to a corn basis. 2/ Includes quantity under loan and farmer-owned reserve. 3/ Estimated. 4/ Excludes support payments. 5/ October 1982 through April 1983 average. 6/ Deficiency, disaster, and diversion payments. 7/ Disaster and diversion payments. 8/ Disaster payments. 9/ Deficiency and disaster payments. *The probability is 2 out of 3 that the final outcome will be within this range.

Table 3.--Sorghum: marketing year supply and disappearance, area, and prices, 1978-83

Year beginning October 1	Supply: Beginning stocks	Supply: Production	Supply: Imports	Supply: Total	Disappearance: Domestic use: Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Ending stocks Sept. 30: Govt. owned	Privately owned 1/	Total
	Million bushels													
1978/79	190.5	731.3	---	921.8	6.0	4.1	1.8	543.8	555.7	206.6	762.3	43.6	115.9	159.5
1979/80	159.5	808.9	---	968.4	6.0	4.6	2.0	484.4	497.0	324.9	821.9	43.9	102.6	146.5
1980/81	146.5	579.2	---	725.7	5.0	4.3	2.0	307.1	318.4	298.7	617.1	38.2	70.4	108.6
1981/82	108.6	879.2	---	987.8	4.3	4.8	2.0	431.0	442.1	249.1	691.2	42.9	253.7	296.6
1982/83 2/	296.6	841.1	---	1,137.7	4.9	4.5	1.6	424.7	435.7	200.0	635.7	125.0	377.0	502.0
1983/84*	502.0	650.0 (+65)	---	1,152.0 (+65)	---	11.0	---	450.0 (+ 55)	461.0 (+ 55)	250.0 (+ 40)	711.0 (+ 80)			441.0 (+ 80)

Year beginning October 1	Area: National program	Area: Set-aside and diverted	Area: Planted	Area: Harvested for grain	Yield per harvested acre	Average prices: Received by farmers 3/	Average prices: Kansas City No. 2 Yellow	Average prices: Texas No. 2 Yellow	Average prices: Gulf ports No. 2 Yellow	Government support program: National average loan rate	Government support program: Target price	Total payments to participants
	Million acres				Bushels		Dollars per cwt.					Mil. dol.
1978/79	13.7	1.4	16.2	13.4	54.5	3.59	4.00	4.40	4.65	3.39	4.07	5/ 243
1979/80	15.9	1.2	15.3	12.9	62.7	4.18	4.65	4.97	5.54	3.57	4.18	5/ 99
1980/81	12.8	---	15.6	12.5	46.3	5.25	5.36	5.86	6.16	3.82	4.46	6/ 101
1981/82	14.3	---	16.0	13.7	64.1	4.27	4.29	4.85	4.97	4.07	4.55	7/ 268
1982/83 2/	---	0.7	16.1	14.2	59.0	4.46	4/ 4.62	4/ 5.94	4/ 5.25	4.32	4.64	7/ 66
1983/84						4.46-4.82				4.50	4.86	8/ 180

1/ Includes quantity under loan and farmer-owned reserve. 2/ Estimated. 3/ Excludes support payments. 4/ October 1982 through April 1983 average. 5/ Deficiency, disaster, and diversion payments. 6/ Disaster payments. 7/ Deficiency and disaster payments. 8/ Deficiency and diversion payments. *The probability is 2 out of 3 that the final outcome will be within this range.

Table 4.--Barley: marketing year supply and disappearance, area, and prices, 1978-83

Year beginning June 1	Supply: Beginning stocks	Supply: Production	Supply: Imports	Supply: Total	Disappearance: Domestic use: Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Ending stocks May 31: Govt. owned	Privately owned 1/	Total
	Million bushels													
1978/79	173.1	454.8	10.5	638.4	6.0	147.6	13.6	217.5	384.7	25.7	410.4	2.5	225.5	228.0
1979/80	228.0	382.8	11.8	622.6	7.0	150.9	14.0	203.8	375.7	54.8	430.5	3.2	188.9	192.1
1980/81	192.1	361.0	10.2	563.3	7.0	155.3	13.2	173.8	349.3	76.7	426.0	3.4	133.9	137.3
1981/82	137.3	479.3	9.6	626.2	6.9	150.9	16.3	202.3	376.4	100.1	476.5	3.3	146.4	149.7
1982/83 2/	149.7	522.4	10.0	682.1	7.2	152.4	17.4	240.1	417.1	45.0	462.1	8.0	212.0	220.0
1983/84*	220.0	510.0 (+45)	10.0	740.0 (+45)	---	180.0 (± 5)	---	260.0 (± 25)	440.0 (± 25)	60.0 (± 15)	500.0 (± 35)			240.0 (± 35)

Year beginning June 1	Area: National program	Area: Set-aside and diverted	Area: Planted	Area: Harvested for grain	Yield per harvested acre	Average prices: Received by farmers 3/	Minneapolis: No. 2 or better, feed	Minneapolis: No. 3 or better, malting	Portland: No. 2	Government support program: National average loan rate	Target price	Total payments to participants
	Million acres				Bushels	Dollars per bushel						Mil. dol.
1978/79	7.5	0.8	10.0	9.2	49.2	1.92	1.80	2.38	2.10	1.63	2.25	5/ 97
1979/80	7.8	0.7	8.1	7.5	50.9	2.29	2.16	2.87	2.69	1.71	2.40	6/ 22
1980/81	8.7	---	8.3	7.3	49.6	2.86	2.60	3.64	3.34	1.83	2.55	7/ 31
1981/82	10.2	---	9.7	9.2	52.3	2.45	2.21	3.06	2.87	1.95	2.60	6/ 63
1982/83 2/	---	0.4	9.6	9.1	57.3	2.15	4/ 1.74	4/ 2.51	4/ 2.46	2.08	2.60	8/ 60
1983/84						2.20-2.45				2.16	2.60	9/ 100

1/ Includes quantity under loan and farmer-owned reserve. 2/ Estimated. 3/ Excludes support payments. 4/ June 1982 through April 1983 average. 5/ Deficiency, disaster, and diversion payments. 6/ Deficiency and disaster payments. 7/ Disaster payments. 8/ Deficiency payments. 9/ Deficiency and diversion payments. *The probability is 2 out of 3 that the final outcome will be within this range.

Table 5.--Oats: marketing year supply and disappearance, area, and prices, 1978-83

Year beginning June 1	Supply: Beginning stocks	Supply: Production	Supply: Imports	Supply: Total	Disappearance: Domestic use: Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Ending stocks May 31: Govt. owned	Privately owned 1/	Total
	Million bushels													
1978/79	313.1	581.7	0.7	895.5	41.0	---	36.1	525.7	602.8	12.7	615.5	2.7	277.3	280.0
1979/80	280.0	526.6	0.9	807.5	40.7	---	34.6	491.7	567.0	4.1	571.1	2.7	233.7	236.4
1980/81	236.4	458.3	1.3	696.0	41.0	---	33.0	431.8	505.8	13.3	519.1	2.5	174.4	176.9
1981/82	176.9	509.2	1.6	687.7	41.2	---	35.4	452.5	529.1	6.6	535.7	0.7	151.3	152.0
1982/83 2/	152.0	617.0	3.0	772.0	41.7	---	43.3	450.0	535.0	5.0	540.0	1.0	231.0	232.0
1983/84*	232.0	485.0 (+50)	3.0	720.0 (+50)	--- 75.0 ---			450.0 (+ 35)	525.0 (+ 35)	10.0 (+ 3)	535.0 (+ 35)			185.0 (+ 35)

Year beginning June 1	Area: National program	Area: Set-aside and diverted 3/	Area: Planted	Area: Harvested for grain	Yield per harvested acre	Average prices: Received by farmers 4/	Minneapolis: No. 2 white, heavy	Portland: No. 2 white, heavy	Toledo: No. 2 5/	Government support program: National average loan rate	Target price	Total payments to participants
	Million acres				Bushels	Dollars per bushel						Mil. dol.
1978/79	---	---	16.4	11.1	52.3	1.20	1.43	1.79	1.37	1.03	---	---
1979/80	---	---	14.0	9.7	54.4	1.36	1.57	1.87	1.60	1.08	---	---
1980/81	---	---	13.4	8.7	53.0	1.79	2.04	2.42	2.17	1.16	---	---
1981/82	---	---	13.7	9.4	54.1	1.89	2.14	2.36	2.23	1.24	---	---
1982/83 2/	---	0.1	14.2	10.6	58.4	1.45	6/ 1.69	6/ 2.18	6/ 1.56	1.31	1.50	---
1983/84						1.45-1.65				1.36	1.60	7/ 23

1/ Includes quantity under loan and farmer-owned reserve. 2/ Estimated. 3/ Not included in the program until 1982. 4/ Excludes support payments. 5/ Prior to June 1981 reported for Chicago. 6/ June 1982 through April 1983 average. 7/ Deficiency and diversion payments. *The probability is 2 out of 3 that the final outcome will be within this range.

Table 6.--Feed grains: feed year supply and disappearance, specified periods, 1978-83
(corn, sorghum, oats, barley)

Year and periods beginning October 1	Supply				Disappearance							Ending stocks		
					Domestic use									
	Beginning stocks	Production	Imports	Total	Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million metric tons													
1978/79														
Oct.-Dec.	52.7	203.2	0.1	256.0	3.6	1.2	0.1	45.1	50.0	12.9	62.9	3.0	190.1	193.1
Jan.-Mar.	193.1	---	0.1	193.2	3.2	1.2	0.3	39.0	43.7	12.6	56.3	3.7	133.2	136.9
Apr.-May	136.9	---	0.1	137.0	2.4	0.9	0.8	21.6	25.7	10.6	36.3	3.7	97.0	100.7
June-Sept.	100.7	16.0	0.1	116.8	5.2	1.7	0.2	30.4	37.5	23.8	61.3	3.7	51.8	55.5
Mkt. year	52.7	219.2	0.4	272.3	14.4	5.0	1.4	136.1	156.9	59.9	216.8	3.7	51.8	55.5
1979/80														
Oct.-Dec.	55.5	222.2	0.1	277.8	3.5	1.2	0.1	47.6	52.4	19.2	71.6	3.8	202.4	206.2
Jan.-Mar.	206.2	---	0.1	206.3	3.2	1.3	0.3	39.6	44.4	17.8	62.2	3.8	140.3	144.1
Apr.-May	144.1	---	2/	144.1	2.5	1.0	0.8	20.3	24.6	11.6	36.2	5.9	102.0	107.9
June-Sept.	107.9	14.5	0.1	122.5	6.5	1.9	0.2	30.4	39.0	23.1	62.1	7.7	52.7	60.4
Mkt. year	55.5	236.7	0.3	292.5	15.7	5.4	1.4	137.9	160.4	71.7	232.1	7.7	52.7	60.4
1980/81														
Oct.-Dec.	60.4	183.4	0.1	243.9	3.7	1.2	0.1	45.5	50.5	20.5	71.0	7.7	165.2	172.9
Jan.-Mar.	172.9	---	0.1	173.0	3.2	1.3	0.3	32.1	36.9	18.7	55.6	7.6	109.8	117.4
Apr.-May	117.4	---	2/	117.4	2.8	1.0	0.8	20.8	25.4	11.3	36.7	7.6	73.1	80.7
June-Sept.	80.7	17.8	0.1	98.6	7.5	1.8	0.2	24.8	34.3	18.8	53.1	7.1	38.4	45.5
Mkt. year	60.4	201.2	0.3	261.9	17.2	5.3	1.4	123.2	147.1	69.3	216.4	7.1	38.4	45.5
1981/82														
Oct.-Dec.	45.5	230.7	0.1	276.3	4.1	1.1	0.1	47.4	52.7	16.6	69.3	7.4	199.6	207.0
Jan.-Mar.	207.0	---	0.1	207.1	3.5	1.4	0.3	36.6	41.8	14.8	56.6	7.7	142.8	150.5
Apr.-May	150.5	---	0.1	150.6	3.1	1.0	0.9	20.1	25.1	11.2	36.3	8.0	106.3	114.3
June-Sept.	114.3	20.3	0.1	134.7	8.2	1.9	0.2	23.7	34.0	15.8	49.8	8.9	76.0	84.9
Mkt. year	45.5	251.0	0.4	296.9	18.9	5.4	1.5	127.8	153.6	58.4	212.0	8.9	76.0	84.9
1982/83														
Oct.-Dec	84.9	234.7	0.1	319.7	4.7	1.4	0.1	48.1	54.3	14.9	69.2	12.2	238.3	250.5
Jan.-Mar.	250.5	---	0.1	250.6	3.8	1.7	0.2	41.5	47.2	14.8	62.0	13.6	175.0	188.6
Apr.-May														
June-Sept.														
Mkt. year														

1/ Includes quantity under loan and farmer-owned reserve. 2/ Less than 50,000 metric tons.

Table 7.--Corn: marketing year supply and disappearance, specified periods, 1978-83

Year and periods beginning October 1	Supply				Disappearance							Ending stocks		
					Domestic use									
	Beginning stocks	Production	Imports	Total	Food	Alc. beverages 1/	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 2/	Total
	Million bushels													
1978/79														
Oct.-Dec	1,111.4	7,267.9	0.1	8,379.4	132.8	17.1	---	1,456.4	1,606.3	454.0	2,060.3	77.3	6,241.8	6,319.1
Jan.-Mar.	6,319.1	---	0.4	6,319.5	116.9	16.9	3.9	1,255.1	1,392.8	426.3	1,819.1	98.8	4,401.6	4,500.4
Apr.-May	4,500.4	---	0.2	4,500.6	90.3	13.2	11.7	711.0	826.2	387.2	1,213.4	100.6	3,186.6	3,287.2
June-Sept.	3,287.2	---	0.5	3,287.7	191.2	22.8	3.9	900.3	1,118.2	865.6	1,983.8	99.7	1,204.2	1,303.9
Mkt. year	1,111.4	7,267.9	1.2	8,380.5	531.2	70.0	19.5	4,322.8	4,943.5	2,133.1	7,076.6	99.7	1,204.2	1,303.9
1979/80														
Oct.-Dec.	1,303.9	7,938.8	0.3	9,243.0	128.2	16.3	---	1,549.4	1,693.9	662.9	2,356.8	99.7	6,786.5	6,886.2
Jan.-Mar.	6,886.2	---	0.3	6,886.5	116.6	18.4	4.0	1,308.2	1,447.2	582.0	2,029.2	101.2	4,756.1	4,857.3
Apr.-May	4,857.3	---	0.1	4,857.4	93.2	13.9	12.0	682.3	801.4	385.6	1,187.0	180.5	3,489.9	3,670.4
June-Sept.	3,670.4	---	0.4	3,670.8	244.8	23.7	4.0	978.7	1,251.2	802.1	2,053.3	256.3	1,361.2	1,617.5
Mkt. year	1,303.9	7,938.8	1.1	9,243.8	582.8	72.3	20.0	4,518.6	5,193.7	2,432.6	7,626.3	256.3	1,361.2	1,617.5
1980/81														
Oct.-Dec.	1,617.5	6,644.8	0.2	8,262.5	136.3	16.6	---	1,523.0	1,675.9	727.8	2,403.7	254.3	5,604.5	5,858.8
Jan.-Mar.	5,858.8	---	0.3	5,859.1	116.3	18.6	4.0	1,100.1	1,239.0	632.9	1,871.9	250.0	3,737.2	3,987.2
Apr.-May	3,987.2	---	0.1	3,987.3	106.7	13.8	12.2	684.7	817.4	395.7	1,213.1	251.6	2,522.6	2,774.2
June-Sept.	2,774.2	---	0.6	2,774.8	282.5	24.6	4.0	830.9	1,142.0	598.8	1,740.8	237.8	796.2	1,034.0
Mkt. year	1,617.5	6,644.8	1.2	8,263.5	641.8	73.6	20.2	4,138.7	4,874.3	2,355.2	7,229.5	237.8	796.2	1,034.0
1981/82														
Oct.-Dec.	1,034.0	8,201.6	0.4	9,236.0	153.2	16.8	---	1,552.8	1,722.8	545.5	2,268.3	247.6	6,720.1	6,967.7
Jan.-Mar.	6,967.7	---	0.3	6,968.0	128.4	20.2	3.9	1,194.3	1,346.8	489.4	1,836.2	261.7	4,870.1	5,131.8
Apr.-May	5,131.8	---	0.1	5,131.9	119.4	15.2	12.1	672.1	818.8	409.0	1,227.8	269.7	3,634.4	3,904.1
June-Sept.	3,904.1	---	0.4	3,904.5	308.4	30.5	3.4	753.3	1,095.6	523.0	1,618.6	302.4	1,983.5	2,285.9
Mkt. year	1,034.0	8,201.6	1.2	9,236.8	709.4	82.7	19.4	4,172.5	4,984.0	1,966.9	6,950.9	302.4	1,983.5	2,285.9
1982/83														
Oct.-Dec.	2,285.9	8,397.3	0.3	10,683.5	175.2	27.9	---	1,543.9	1,747.0	512.7	2,259.7	429.0	7,994.8	8,423.8
Jan.-Mar.	8,423.8	---	0.2	8,424.0	140.0	34.6	1.3	1,377.4	1,553.3	507.9	2,061.2	483.4	5,879.4	6,362.8
Apr.-May														
June-Sept.														
Mkt. year														

1/ Malt beverage and distilled liquor grain products converted to a corn basis. 2/ Includes quantity under loan and farmer-owned reserve.

Table 8.--Sorghum: marketing year supply and disappearance, specified periods, 1978-83

Year and periods beginning October 1	Supply				Disappearance							Ending stocks		
					Domestic use								Privately:	
	Beginning stocks	Production	Imports	Total	Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	owned 1/	Total
					Million bushels									
1978/79														
Oct.-Dec.	190.5	731.3	---	921.8	1.4	1.1	---	235.7	238.2	46.6	284.8	36.6	600.4	637.0
Jan.-Mar.	637.0	---	---	637.0	1.6	1.0	0.2	148.6	151.4	68.3	219.7	42.4	374.9	417.3
Apr.-May	417.3	---	---	417.3	1.3	0.7	1.1	64.0	67.1	28.0	95.1	42.8	279.4	322.2
June-Sept.	322.2	---	2/	322.2	1.7	1.3	0.5	95.5	99.0	63.7	162.7	43.6	115.9	159.5
Mkt. year	190.5	731.3	2/	921.8	6.0	4.1	1.8	543.8	555.7	206.6	762.3	43.6	115.9	159.5
1979/80														
Oct.-Dec.	159.5	808.9	---	968.4	1.6	1.3	---	243.6	246.5	74.2	320.7	45.3	602.4	647.7
Jan.-Mar.	647.7	---	---	647.7	1.6	1.2	0.2	140.2	143.2	108.5	251.7	45.6	350.4	396.0
Apr.-May	396.0	---	---	396.0	1.4	0.7	1.2	54.5	57.8	60.3	118.1	45.6	232.3	277.9
June-Sept.	277.9	---	2/	277.9	1.4	1.4	0.6	46.1	49.5	81.9	131.4	43.9	102.6	146.5
Mkt. year	159.5	808.9	2/	968.4	6.0	4.6	2.0	484.4	497.0	324.9	821.9	43.9	102.6	146.5
1980/81														
Oct.-Dec.	146.5	579.2	2/	725.7	1.6	1.2	---	198.2	201.0	60.3	261.3	43.7	420.7	464.4
Jan.-Mar.	464.4	---	2/	464.4	1.6	0.9	0.2	63.8	66.5	84.1	150.6	43.5	270.3	313.8
Apr.-May	313.8	---	2/	313.8	0.8	0.7	1.2	84.8	87.5	41.7	129.2	43.8	140.7	184.6
June-Sept.	184.6	---	2/	184.6	1.0	1.5	0.6	-39.7	-36.6	112.6	76.0	38.2	70.4	108.6
Mkt. year	146.5	579.2	2/	725.7	5.0	4.3	2.0	307.1	318.4	298.7	617.1	38.2	70.4	108.6
1981/82														
Oct.-Dec.	108.6	879.2	2/	987.8	1.3	1.3	---	217.9	220.5	77.8	298.3	38.4	651.1	689.5
Jan.-Mar.	689.5	---	2/	689.5	1.3	1.3	0.2	150.5	153.3	74.3	227.6	38.2	423.7	461.9
Apr.-May	461.9	---	2/	461.9	0.5	0.8	1.2	57.8	60.3	21.8	82.1	40.3	339.5	379.8
June-Sept.	379.8	---	2/	379.8	1.2	1.4	0.6	4.8	8.0	75.2	83.2	42.9	253.7	296.6
Mkt. year	108.6	879.2	2/	987.8	4.3	4.8	2.0	431.0	442.1	249.1	691.2	42.9	253.7	296.6
1982/83														
Oct.-Dec	296.6	841.1	2/	1,137.7	1.4	1.0	---	259.2	261.6	67.0	328.6	46.7	762.4	809.1
Jan.-Mar.	809.1	---	2/	809.1	1.2	1.2	0.1	125.4	127.9	62.7	190.6	47.8	570.7	618.5
Apr.-May														
June-Sept.														
Mkt. year														

1/ Includes quantity under loan and farmer-owned reserve. 2/ Less than 50,000 bushels.

Table 9.--Barley: marketing year supply and disappearance, specified periods, 1978-83

Year and periods beginning June 1	Supply				Disappearance							Ending stocks		
					Domestic use								Privately owned 1/	
	Beginning stocks	Production	Imports	Total	Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned		Total
	Million bushels													
1978/79														
June-Sept.	173.1	454.8	2.7	630.6	2.3	52.5	1.1	83.8	139.7	18.8	158.5	0.8	471.3	472.1
Oct.-Dec.	472.1	---	2.8	474.9	1.4	33.0	1.9	42.7	79.0	4.7	83.7	1.4	389.8	391.2
Jan.-Mar.	391.2	---	3.0	394.2	1.4	35.5	3.3	56.8	97.0	0.8	97.8	2.3	294.1	296.4
Apr.-May	296.4	---	2.0	298.4	0.9	26.6	7.3	34.2	69.0	1.4	70.4	2.5	225.5	228.0
Mkt. year	173.1	454.8	10.5	638.4	6.0	147.6	13.6	217.5	384.7	25.7	410.4	2.5	225.5	228.0
1979/80														
June-Sept.	228.0	382.8	3.7	614.5	2.5	51.9	1.1	87.3	142.8	9.9	152.7	2.9	458.9	461.8
Oct.-Dec.	461.8	---	2.8	464.6	1.7	34.0	2.0	38.9	76.6	22.4	99.0	3.1	362.5	365.6
Jan.-Mar.	365.6	---	3.2	368.8	1.7	37.0	3.4	53.3	95.4	11.1	106.5	3.3	259.0	262.3
Apr.-May	262.3	---	2.1	264.4	1.1	28.0	7.5	24.3	60.9	11.4	72.3	3.2	188.9	192.1
Mkt. year	228.0	382.8	11.8	622.6	7.0	150.9	14.0	203.8	375.7	54.8	430.5	3.2	188.9	192.1
1980/81														
June-Sept.	192.1	361.0	3.5	556.6	2.5	56.6	1.2	78.9	139.2	24.9	164.1	3.5	389.0	392.5
Oct.-Dec.	392.5	---	2.3	394.8	1.7	33.9	2.2	32.2	70.0	21.4	91.4	3.5	299.9	303.4
Jan.-Mar.	303.4	---	2.7	306.1	1.7	36.0	3.7	38.6	80.0	22.7	102.7	3.4	200.0	203.4
Apr.-May	203.4	---	1.7	205.1	1.1	28.8	6.1	24.1	60.1	7.7	67.8	3.4	133.9	137.3
Mkt. year	192.1	361.0	10.2	563.3	7.0	155.3	13.2	173.8	349.3	76.7	426.0	3.4	133.9	137.3
1981/82														
June-Sept.	137.3	479.3	2.4	619.0	2.5	54.5	1.3	76.5	134.8	32.6	167.4	3.3	448.3	451.6
Oct.-Dec.	451.6	---	2.4	454.0	1.7	32.1	2.3	51.8	87.9	33.0	120.9	3.3	329.8	333.1
Jan.-Mar.	333.1	---	2.7	335.8	1.7	37.2	4.0	42.9	85.8	23.1	108.9	3.3	223.6	226.9
Apr.-May	226.9	---	2.1	229.0	1.0	27.1	8.7	31.1	67.9	11.4	79.3	3.3	146.4	149.7
Mkt. year	137.3	479.3	9.6	626.2	6.9	150.9	16.3	202.3	376.4	100.1	476.5	3.3	146.4	149.7
1982/83														
June-Sept.	149.7	522.4	5.1	677.2	2.5	51.3	1.3	95.3	150.4	25.4	175.8	3.9	497.5	501.4
Oct.-Dec.	501.4	---	1.9	503.3	1.8	32.1	2.8	42.1	78.8	6.4	85.2	4.8	413.3	418.1
Jan.-Mar.	418.1	---	2.2	420.3	1.8	37.1	3.9	68.0	110.8	12.7	123.5	5.8	291.0	296.8
Apr.-May														
Mkt. year														

1/ Includes quantity under loan and farmer-owned reserve.

Table 10.--Oats: marketing year supply and disappearance, specified periods, 1978-83

Year and periods beginning June 1	Supply				Disappearance							Ending stocks	
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food	Alc. beverages	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels													
1978/79														
June-Sept.	313.1	581.7	0.3	895.1	14.7	---	1.8	224.8	241.3	7.9	249.2	1.5	644.4	645.9
Oct.-Dec.	645.9	---	0.1	646.0	10.3	---	1.8	84.2	96.3	3.4	99.7	2.5	543.8	546.3
Jan.-Mar.	546.3	---	0.2	546.5	10.7	---	7.2	146.3	164.2	0.7	164.9	2.7	378.9	381.6
Apr.-May	381.6	---	0.1	381.7	5.3	---	25.3	70.4	101.0	0.7	101.7	2.7	277.3	280.0
Mkt. year	313.1	581.7	0.7	895.5	41.0	---	36.1	525.7	602.8	12.7	615.5	2.7	277.3	280.0
1979/80														
June-Sept.	280.0	526.6	0.3	806.9	14.6	---	1.7	221.6	237.9	0.9	238.8	2.6	565.5	568.1
Oct.-Dec.	568.1	---	0.2	568.3	10.4	---	1.7	77.5	89.6	1.9	91.5	2.6	474.2	476.8
Jan.-Mar.	476.8	---	0.2	477.0	10.3	---	6.9	119.7	136.9	0.5	137.4	2.7	336.9	339.6
Apr.-May	339.6	---	0.2	339.8	5.4	---	24.3	72.9	102.6	0.8	103.4	2.7	233.7	236.4
Mkt. year	280.0	526.6	0.9	807.5	40.7	---	34.6	491.7	567.0	4.1	571.1	2.7	233.7	236.4
1980/81														
June-Sept.	236.4	458.3	0.6	695.3	15.0	---	1.8	190.0	206.8	3.9	210.7	2.7	481.9	484.6
Oct.-Dec.	484.6	---	0.2	484.8	10.0	---	1.8	79.2	91.0	2.8	93.8	2.7	388.3	391.0
Jan.-Mar.	391.0	---	0.3	391.3	10.0	---	7.0	115.6	132.6	2.6	135.2	2.5	253.6	256.1
Apr.-May	256.1	---	0.2	256.3	6.0	---	22.4	47.0	75.4	4.0	79.4	2.5	174.4	176.9
Mkt. year	236.4	458.3	1.3	696.0	41.0	---	33.0	431.8	505.8	13.3	519.1	2.5	174.4	176.9
1981/82														
June-Sept.	176.9	509.2	0.3	686.4	16.0	---	2.0	206.7	224.7	3.2	227.9	1.7	456.8	458.5
Oct.-Dec.	458.5	---	0.2	458.7	10.0	---	2.0	80.3	92.3	1.2	93.5	1.7	363.5	365.2
Jan.-Mar.	365.2	---	0.2	365.4	10.0	---	7.3	110.0	127.3	1.2	128.5	1.7	235.2	236.9
Apr.-May	236.9	---	0.9	237.8	5.2	---	24.1	55.5	84.8	1.0	85.8	0.7	151.3	152.0
Mkt. year	176.9	509.2	1.6	687.7	41.2	---	35.4	452.5	529.1	6.6	535.7	0.7	151.3	152.0
1982/83														
June-Sept.	152.0	617.0	0.8	769.8	16.2	---	2.0	169.0	187.2	1.3	188.5	0.6	580.7	581.3
Oct.-Dec.	581.3	---	0.2	581.5	10.0	---	2.0	94.8	106.8	1.0	107.8	0.7	473.0	473.7
Jan.-Mar.	473.7	---	1.6	475.3	10.7	---	7.6	124.2	142.5	0.3	142.8	0.7	331.8	332.5
Apr.-May														
Mkt. year														

1/ Includes quantity under loan and farmer-owned reserve.

Table 11.--Average prices received by farmers, United States, by months, 1978-83

Item and year beginning October 1	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average weighted by sales 1/
							Dollars per bushel						
Corn													
1978	1.97	2.02	2.09	2.11	2.18	2.22	2.27	2.35	2.49	2.64	2.54	2.51	2.25
1979	2.41	2.27	2.38	2.45	2.39	2.40	2.36	2.42	2.49	2.73	2.92	3.01	2.52
1980	2.99	3.10	3.19	3.19	3.22	3.25	3.24	3.24	3.17	3.14	2.87	2.55	3.11
1981	2.45	2.34	2.39	2.54	2.44	2.46	2.55	2.60	2.57	2.50	2.30	2.15	2.50
1982	1.98	2.13	2.26	2.36	2.56	2.71	*3.00						
Sorghum							Dollars per cwt						
1978	3.35	3.45	3.58	3.54	3.55	3.54	3.58	3.66	4.30	4.46	4.27	4.24	3.59
1979	3.90	3.99	3.90	4.05	3.98	4.05	3.96	4.04	4.49	4.95	5.12	5.12	4.18
1980	5.36	5.48	5.49	5.48	5.33	5.17	5.25	5.16	5.03	4.84	4.55	4.07	5.25
1981	3.90	3.87	3.95	4.09	4.08	4.00	4.10	4.35	4.17	3.96	3.95	3.80	4.27
1982	3.70	3.78	3.97	4.09	4.42	4.67	*4.98						

Item and year beginning June 1	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Average weighted by sales 1/
							Dollars per bushel						
Oats													
1978	1.16	1.08	1.06	1.06	1.08	1.15	1.19	1.22	1.25	1.27	1.29	1.29	1.20
1979	1.35	1.33	1.24	1.29	1.31	1.41	1.31	1.39	1.37	1.34	1.38	1.43	1.36
1980	1.48	1.50	1.53	1.63	1.65	1.84	1.92	1.98	2.01	2.08	2.05	2.05	1.79
1981	1.99	1.84	1.72	1.74	1.78	1.88	1.94	1.97	1.99	2.02	1.99	1.99	1.89
1982	1.88	1.57	1.39	1.35	1.32	1.40	1.44	1.47	1.48	1.48	*1.49		
Barley													
1978	2.04	1.83	1.86	1.85	1.90	1.93	1.90	1.95	1.87	1.89	1.96	2.07	1.92
1979	2.30	2.22	2.23	2.33	2.32	2.40	2.32	2.27	2.23	2.18	2.15	2.21	2.29
1980	2.36	2.52	2.59	2.65	2.81	2.90	2.97	3.09	3.05	3.04	3.04	3.00	2.86
1981	2.94	2.41	2.37	2.44	2.38	2.49	2.48	2.50	2.40	2.40	2.42	2.56	2.45
1982	2.39	2.16	2.20	2.17	1.98	2.06	2.19	2.16	2.00	2.03	*2.17		

Item and year beginning May 1	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Average weighted by sales
							Dollars per ton						
Hay (mid-month)													
1978	55.30	51.20	49.20	49.00	47.80	47.10	46.40	47.30	48.90	50.70	50.20	49.90	49.80
1979	65.60	58.00	56.00	57.50	59.00	60.80	58.90	60.10	59.10	60.00	57.40	60.10	59.50
1980	69.30	65.10	67.00	67.20	71.90	77.20	75.00	74.80	72.80	72.50	69.80	68.20	71.00
1981	75.30	66.90	64.00	63.90	62.70	64.80	65.40	65.70	67.90	69.90	69.50	73.30	67.10
1982	77.50	69.60	66.40	65.00	65.90	68.20	68.90	68.10	70.10	74.60	70.50	75.30	68.60

1/ Includes an allowance for unredeemed loans and purchase agreement deliveries valued at the average loan rate, by States; excludes Government payments.
*Preliminary.

Source: Agricultural Prices, Crop Reporting Board, USDA.

Table 12.--Cash prices at principal markets, 1978-83

Item and year beginning October 1	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Simple average
						Dollars per bushel							
CORN No. 2 Yellow, St. Louis 1/													
1978	2.13	2.25	2.30	2.33	2.41	2.47	2.53	2.60	2.77	2.95	2.73	2.68	2.51
1979	2.59	2.51	2.66	2.50	2.64	2.54	2.53	2.60	2.66	3.01	3.31	3.26	2.73
1980	3.35	3.53	3.59	3.60	3.47	3.42	3.49	3.42	3.33	3.34	3.03	2.61	3.35
1981	2.53	2.59	2.54	2.65	2.61	2.66	2.78	2.78	2.75	2.68	2.42	2.32	2.61
1982	2.32	2.43	2.49	2.52	2.79	2.99	*3.24						
CORN No. 2 Yellow, Omaha													
1978	2.05	2.04	2.09	2.12	2.13	2.17	2.26	2.40	2.59	2.68	2.45	2.37	2.28
1979	2.37	2.32	2.36	2.26	2.33	2.23	2.32	2.43	2.50	2.81	2.98	3.01	2.49
1980	3.16	3.34	3.30	3.29	3.18	3.17	3.24	3.24	3.19	3.15	2.79	2.51	3.13
1981	2.44	2.39	2.37	2.47	2.45	2.48	2.61	2.65	2.65	2.54	2.23	2.23	2.46
1982	2.12	2.35	2.37	2.42	2.62	2.82	*3.09						
SORGHUM No. 2 Yellow, Kansas City						Dollars per cwt							
1978	3.61	3.67	3.64	3.71	3.73	3.77	3.81	3.92	4.41	4.89	4.44	4.34	4.00
1979	4.42	4.41	4.57	4.21	4.35	4.20	4.15	4.31	4.49	5.36	5.71	5.61	4.65
1980	5.65	5.91	5.82	5.79	5.52	5.46	5.49	5.38	5.23	5.29	4.58	4.16	5.36
1981	4.14	4.14	4.27	4.44	4.26	4.28	4.45	4.48	4.50	4.38	4.02	4.06	4.29
1982	3.85	4.25	4.37	4.54	4.87	5.08	*5.39						

Item and year beginning June 1	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						Dollars per bushel							
OATS No. 2 Heavy, Minneapolis													
1978	1.36	1.24	1.28	1.36	1.39	1.47	1.40	1.47	1.54	1.60	1.48	1.55	1.43
1979	1.68	1.60	1.47	1.55	1.65	1.67	1.59	1.52	1.50	1.48	1.52	1.62	1.57
1980	1.67	1.80	1.70	1.86	1.96	2.15	2.16	2.20	2.25	2.23	2.21	2.23	2.04
1981	2.18	2.02	1.99	2.02	2.09	2.28	2.10	2.23	2.26	2.16	2.21	2.16	2.14
1982	2.12	1.87	1.53	1.51	1.51	1.67	1.67	1.67	1.67	1.63	*1.73		
BARLEY No. 2 or Better Feed, Minneapolis													
1978	1.84	1.71	1.68	1.77	1.81	1.88	1.79	1.71	1.69	1.86	1.89	1.96	1.80
1979	2.16	2.39	2.15	2.22	2.34	2.11	2.15	2.09	2.04	2.06	2.12	2.09	2.16
1980	2.15	2.48	2.39	2.43	2.77	3.03	2.75	2.81	2.90	2.63	2.51	2.39	2.60
1981	2.09	2.26	2.35	2.21	2.26	2.31	2.06	2.20	2.27	2.16	2.16	2.24	2.21
1982	2.12	1.85	1.72	1.69	1.54	1.58	1.59	1.63	1.72	1.73	*2.01		
BARLEY No. 3 or Better Malting, 65% or Better Plump, Minneapolis													
1978	2.39	2.13	2.19	2.27	2.26	2.47	2.40	2.30	2.33	2.46	2.59	2.73	2.38
1979	2.80	2.82	2.67	3.10	3.18	3.06	2.93	2.87	2.81	2.69	2.73	2.82	2.87
1980	2.99	3.36	3.27	3.63	3.80	3.88	3.77	3.75	3.83	3.71	3.84	3.80	3.64
1981	3.34	2.95	3.15	3.05	3.02	3.07	2.92	3.00	3.14	2.99	2.98	3.05	3.06
1982	2.93	2.63	2.48	2.37	2.42	2.45	2.37	2.38	2.42	2.45	*2.68		

1/ Effective April 1, 1982, reporting of Spot Rail Grain Bids at Chicago by the United States Department of Agriculture, AMS, Livestock and Grain Market News, was discontinued.
* Preliminary.

Source: Grain and Feed Market News, AMS, USDA.

Table 13.--Feed-price ratios for livestock, poultry, and milk, by months, 1978-83

Item and year beginning October 1	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average
HOG/CORN, U.S. basis 1/													
1978	25.8	23.4	23.0	24.0	24.1	21.8	19.4	18.4	15.9	14.4	14.3	14.8	19.9
1979	14.0	15.2	15.5	14.8	15.4	13.9	11.9	11.8	13.3	15.1	15.8	15.3	14.3
1980	15.8	14.7	13.8	12.8	12.8	11.9	12.0	12.6	15.0	15.7	17.1	19.1	14.4
1981	18.4	17.7	16.3	17.1	19.8	19.8	20.1	21.8	22.4	23.2	26.7	28.6	21.0
1982 2/	28.5	24.6	23.7	23.7	21.9	18.6	15.8						
BEEF-STEER/CORN, Omaha 3/													
1978	26.8	26.4	26.6	28.5	30.5	32.7	33.2	30.8	26.5	25.0	25.6	28.6	28.4
1979	27.8	28.9	29.1	29.4	29.0	30.0	27.2	26.6	26.6	25.1	24.3	23.1	27.3
1980	21.3	19.5	19.5	19.1	19.3	19.4	20.0	20.6	21.4	21.5	23.8	26.0	21.0
1981	25.2	25.0	25.0	24.6	25.9	26.5	26.5	27.2	26.5	26.1	29.2	27.5	26.3
1982 2/	27.7	25.1	25.2	24.5	23.4	22.7	21.9						
MILK/FEED, U.S. basis 4/													
1978	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.5	1.5	1.5
1979	1.6	1.6	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.5
1980	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.7
1981	1.5	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
1982 2/	1.6	1.6	1.6	1.6	1.6	1.6	1.5						
EGG/FEED, U.S. basis 5/													
1978	7.0	7.5	8.0	7.8	7.7	8.0	7.4	6.9	6.7	6.1	6.1	6.4	7.1
1979	6.1	6.8	7.3	6.6	5.9	6.3	6.0	5.3	5.5	5.7	6.0	6.2	6.1
1980	5.7	6.0	6.6	5.9	5.7	5.7	6.0	5.2	5.2	5.5	5.8	6.4	5.8
1981	6.5	7.2	6.7	6.6	6.8	7.2	6.6	5.6	5.3	5.7	5.3	6.0	6.3
1982 2/	6.3	6.3	6.0	5.7	5.8	6.2	5.8						
BROILER/FEED, U.S. basis 6/													
1978	2.9	2.8	2.9	3.1	3.3	3.1	3.0	3.2	2.9	2.5	2.3	2.4	2.9
1979	2.2	2.6	2.6	2.8	2.6	2.5	2.3	2.5	2.6	3.3	3.0	2.9	2.7
1980	2.8	2.5	2.5	2.6	2.6	2.6	2.3	2.4	2.5	2.6	2.5	2.4	2.5
1981	2.4	2.4	2.3	2.6	2.6	2.6	2.5	2.6	2.7	2.6	2.4	2.6	2.5
1982 2/	2.5	2.5	2.4	2.6	2.7	2.4	2.3						
TURKEY/FEED, U.S. basis 7/													
1978	5.0	5.1	5.4	5.0	4.6	4.3	4.3	4.2	3.9	3.5	3.7	3.7	4.4
1979	3.9	4.5	4.3	3.8	3.6	3.5	3.4	3.1	3.1	3.5	3.5	3.7	3.7
1980	3.9	3.8	3.5	3.1	3.1	3.2	3.0	3.1	3.2	3.3	3.2	3.1	3.3
1981	2.8	3.1	2.9	2.9	2.9	3.0	3.0	2.9	3.2	3.4	3.4	3.7	3.1
1982 2/	3.9	3.9	3.0	2.8	2.9	2.9	2.7						

1/ Number bushels of corn equal in value to 100 pounds of hog, live weight.
2/ Preliminary.
3/ Based on price of beef-steers 900-1,100 pounds, choice instead of average grade all steers previously published.
4/ Pounds of 16 percent mixed dairy feed equal in value to 1 pound whole milk.
5/ Pounds of laying feed equal in value to 1 dozen eggs.
6/ Pounds of broiler grower feed equal in value to 1 pound broiler, live weight.
7/ Pounds of turkey grower feed equal in value to 1 pound turkey, live weight.

Source: Agricultural Prices, Crop Reporting Board, USDA.

Table 14.--Price trends, selected feeds and corn products

Item	Unit	Oct.-Sept. 1981/82 1/	1982 Nov.	1982 Dec.	1983 Jan.	1983 Feb.	1983 Mar.	1983 Apr. 1/
WHOLESALE, MOSTLY BULK 2/								
Soybean meal, 44% solvent, Decatur	$/ton	183	173	179	179	177	177	187
Soybean meal, high protein, Decatur	"	197	185	190	192	189	193	203
Cottonseed meal, 41% expeller, Memphis	"	160	168	181	186	184	176	188
Linseed meal, 34% solvent, Minneapolis	"	152	136	135	135	135	136	146
Peanut meal, Southeast mills	"	182	188	192	191	192	193	192
Meat meal, Ill. prod. pts.	"	208	210	209	224	235	231	244
Fishmeal, 65% protein, East Coast	"	352	346	370	375	370	363	363
Gluten feed, Chicago	"	113	111	120	125	118	113	110
Gluten meal, 60% protein, Chicago	"	242	215	246	265	268	251	239
Brewers' dried grains, Chicago-Milwaukee	"	97	102	109	113	98	96	104
Distillers' dried grain, Lawrenceburg	"	146	137	137	139	137	140	145
Feather meal, Jackson, Miss.	"	249	226	253	256	N.Q.	N.Q.	N.Q.
Wheat bran, Kansas City	"	82	95	82	85	75	81	107
Wheat middlings, Kansas City	"	82	95	82	85	75	81	107
Rice bran, f.o.b. mills, Arkansas	"	67	81	85	80	56	55	57
Hominy feed, Ill. pts.	"	79	82	80	78	81	89	107
Alfalfa meal, dehy., Kansas City	"	106	116	119	120	121	121	131
Cane molasses, New Orleans	"	51	40	41	45	45	45	45
Molasses beet pulp, Los Angeles	"	115	119	123	121	120	123	126
Animal fat, Ill. prod. pts.	"	14.2	11.5	11.2	11.6	13.5	13.4	14.1
Urea, 42% N., Fort Worth	"	219	211	225	210	210	210	210
Corn, No. 2 white, Kansas City	$/bu.	2.59	2.56	2.99	3.08	3.10	3.11	3.34
PRICES PAID, U.S. BASIS 3/								
Soybean meal, 44%	$/cwt.	13.73	12.90	13.00	13.10	13.20	13.20	13.60
Cottonseed meal, 41%	"	13.77	13.30	13.30	13.50	13.50	13.60	13.80
Wheat bran	"	9.94	9.72	9.78	9.77	9.76	9.73	9.83
Wheat middlings	"	9.52	9.29	9.35	9.37	9.28	9.29	9.40
Broiler grower feed	$/ton	213	198	201	202	206	210	215
Laying feed	"	193	182	185	186	188	189	198
Turkey grower feed	"	231	222	225	226	227	230	241
Chick starter	"	215	202	208	207	210	212	219
Dairy feed, 16%	"	179	172	174	175	177	175	182
Beef cattle concentrate, 32-36% protein	$/cwt.	11.52	11.30	11.60	11.60	11.90	11.70	12.00
Hog concentrate, 38-42% protein	"	14.98	14.30	14.60	14.80	14.90	14.90	15.50
Stock salt	"	6.02	6.10	6.09	6.09	6.13	6.21	6.21
CORN PRODUCTS, WHOLESALE 4/								
Corn meal, New York White	$/cwt.	14.19	13.49	13.47	13.79	14.18	14.50	15.05
Yellow	"	11.77	11.49	11.47	11.79	12.18	12.50	13.05
Grits (brewers'), Chicago	"	9.05	8.61	8.59	8.59	9.28	9.60	10.16
Syrup, Chicago West	c/lb.	14.14	12.75	12.75	12.75	12.75	9.56	9.56
Sugar (dextrose), Chicago West	"	25.00	25.00	23.95	23.25	23.25	23.75	24.44
High-fructose (dried weight in tank cars), Chicago West	"	15.93	11.27	11.27	11.27	11.27	11.97	14.23
Corn starch, f.o.b. Midwest	$/cwt.	10.28	9.31	9.31	9.31	8.06	10.05	11.03

1/ Preliminary. 2/ Grain and Feed Market News, AMS, USDA, except urea which is from Feedstuffs, Miller Publishing Co., Minneapolis, Minnesota. 3/ Agricultural Prices, CRB, USDA. 4/ Milling and Baking News, Kansas City, Missouri, except starch which is from industry sources. N.Q.=No quotations available.

Table 15.--High-protein feed: quantity fed and high-protein animal units, 1975-82 1/

Year beginning October	Quantity fed (in 44% protein soybean meal equivalent)				High-protein animal units	Fed per animal unit
	Oilseed meal	Animal protein	Grain protein	Total		
	- - - 1,000 metric tons - - -				Million	Pounds
1975	16,495	2,918	1,335	20,748	100.7	454
1976	15,118	3,126	1,193	19,437	102.9	416
1977	17,259	3,042	982	21,283	104.5	449
1978	18,472	3,050	1,028	22,550	108.0	460
1979	20,152	3,210	689	24,051	114.6	463
1980	18,365	3,053	566	21,984	113.9	425
1981 2/	18,979	3,080	924	22,982	110.5	458
1982 3/	19,818	2,432	1,063	23,313	110.5	465

1/ Excludes urea and other nitrogenous compounds. 2/ Preliminary. 3/ Forecast.

Table 16.--Processed feeds: quantity fed, 1975-82 1/

Feed	Year beginning October							
	1975	1976	1977	1978	1979	1980	1981 2/	1982 3/
	- - -1,000 metric tons - - -							
HIGH PROTEIN								
Oilseed meal	14,164	12,751	14,766	15,758	17,113	15,646	16,012	17,327
Soybean 4/	1,148	1,412	1,780	1,534	1,641	1,395	1,628	1,145
Linseed	79	117	79	122	146	117	100	70
Peanut	284	184	92	93	108	85	114	80
Sunflower	---	---	---	180	359	40	430	302
Total	15,675	14,464	16,717	17,687	19,367	17,683	18,284	18,924
Animal proteins								
Tankage and meat meal	1,815	1,995	2,112	2,107	2,356	2,229	2,261	1,566
Fishmeal and solubles	461	375	379	462	371	344	340	236
Commercial dried milk products	147	145	178	144	144	146	150	104
Noncommercial milk products	174	172	177	140	132	137	130	90
Total	2,597	2,687	2,846	2,853	3,003	2,856	2,881	1,996
Grain protein feeds								
Gluten feed and meal	1,340	941	1,109	1,083	458	254	941	1,083
Brewers' dried grains	291	269	256	280	307	290	239	275
Distillers' dried grains	363	339	366	449	449	453	448	515
Total	1,994	1,549	1,731	1,812	1,214	997	1,628	1,873
OTHER								
Wheat millfeeds	4,474	4,351	4,508	4,484	4,400	4,638	4,578	4,285
Rice millfeeds	496	546	501	574	633	706	667	624
Dried and molasses beet pulp	1,688	1,593	1,316	1,361	1,485	1,165	1,365	1,278
Alfalfa meal	1,423	1,090	1,358	1,243	1,143	994	898	841
Fats and oils	633	656	667	630	635	630	544	509
Molasses, inedible	3,700	3,575	3,250	3,100	2,812	3,251	2,540	2,378
Miscellaneous byproduct feeds 6/	998	998	998	1,000	907	1,000	1,425	1,334
Total	13,412	12,809	12,598	12,392	12,015	12,384	12,017	11,249
Grain total	33,678	31,509	33,892	34,744	35,599	33,920	34,810	34,042

1/ Adjusted for stocks, production, foreign trade, and nonfeed uses where applicable. 2/ Preliminary. 3/ Forecast. 4/ Includes use in edible soy products and shipments to U.S. territories. 5/ Beginning in 1974, not comparable with earlier years. 6/ Allowance for hominy feed, oat millfeeds, and screenings.

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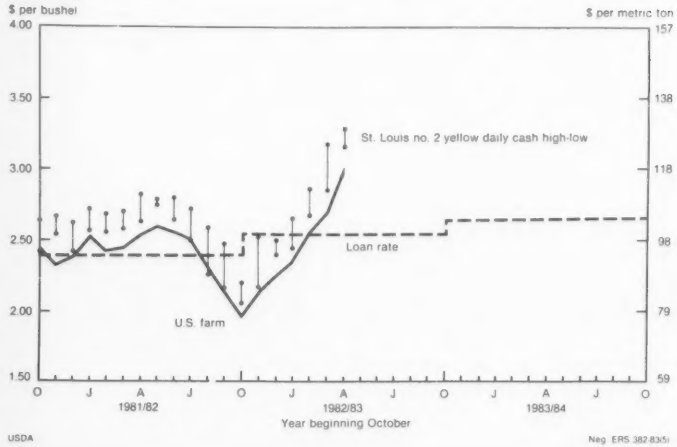

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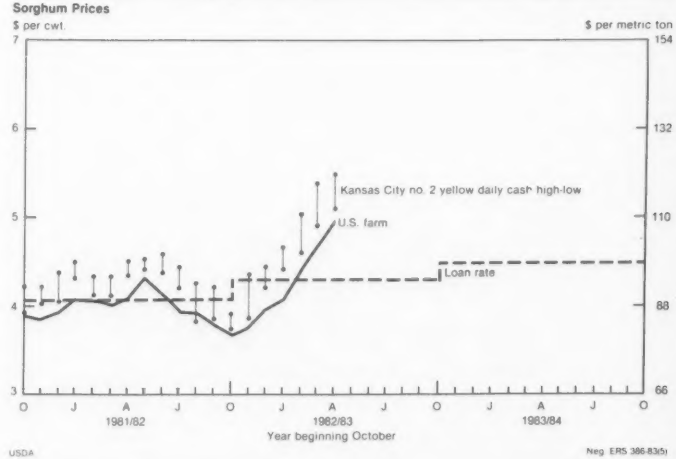

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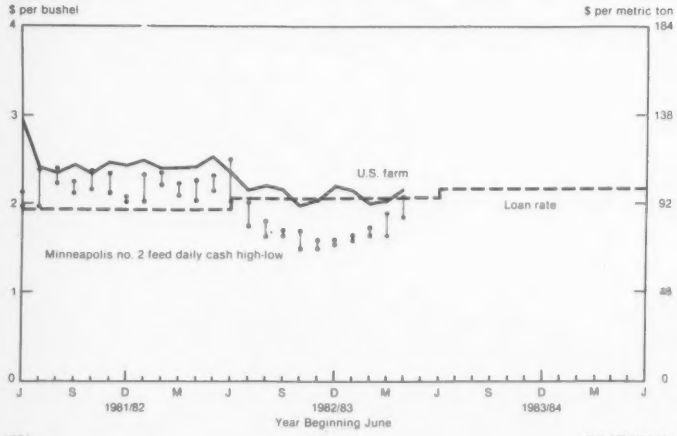

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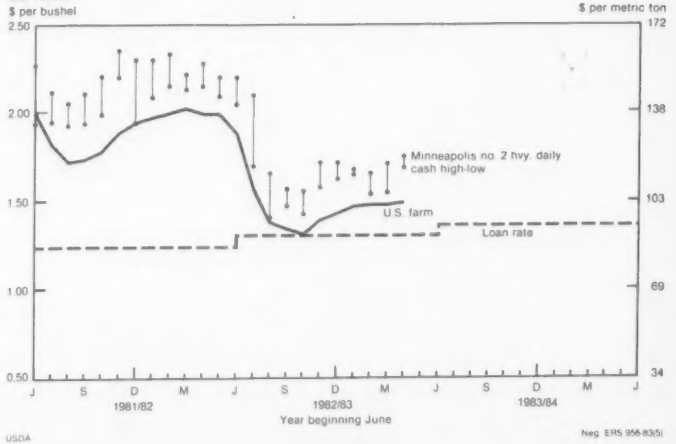

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